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## MEDICINE AND SURGERY.

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JOHN V. SHOEMAKER, A.M., M.D.

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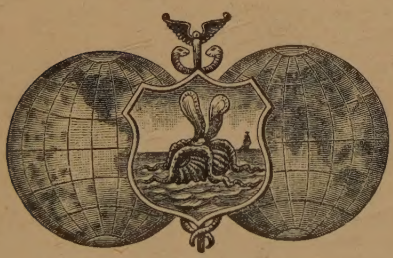

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THE
# MEDICAL BULLETIN:

A MONTHLY JOURNAL OF

## MEDICINE AND SURGERY.

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## CLINICAL LECTURE

### *PROLAPSUS OF THE VAGINA—OPERATION.*

BY E. E. MONTGOMERY, M.D.,

Professor of Gynæcology in Medico-Chirurgical College; Obstetrician to Philadelphia Hospital; ex-President American Association Obstetricians and Gynæcologists.

GENTLEMEN: A few weeks ago I brought before you a woman suffering from a protrusion of the vaginal walls. This protrusion affected more particularly the anterior surface, which presented a globular, rounded mass, and was greatly increased in coughing or straining. This protrusion is known as a cystocele. Before entering upon its further discussion, however, it is well that we say something of the anatomy of the vagina and the forces that retain it in its normal position.

You will see the vagina, in the ordinary anatomical text-books, represented as a widely distended canal, closed by the uterus above, as a cork in a bottle. This is not a correct representation, and gives false ideas as to the arrangement. The vagina is the passage which leads from the vulva to the uterus, and is a closed canal, standing at an angle of sixty degrees with the horizon when the patient is in the erect position. In making the transverse section, you will see that the vagina is simply a slit in the pelvic floor, and that any protrusion of its walls, or of the uterus through it, is as much a hernia as would be the protrusion of the viscera through the other natural canals of the abdomen.

The widest portion of the vagina is that into which the uterus projects, and it narrows down as we approach the vulvar orifice, presenting its most marked constriction at the external opening, where we have the vulva, with its longest diameter at right angles to that of the vagina. The orifice of the vagina and its posterior segment are re-inforced by the muscles which form the perineum; these in their normal muscular tonicity aid in the support of the vagina and the viscera above. Its position is still further maintained by its relation to the levator ani muscles, which pass on either side of the vagina, and to which its walls are partially attached. The vagina is a musculo-membranous canal, having three walls, from without inward,—the areolar fascia, the muscular wall, and the mucous membrane. The latter is lined with pavement epithelium, and does not differ greatly from the skin when subjected to similar conditions. The vagina is 2½ inches in length on the anterior wall and some 4 inches on the posterior. This difference in length is due to the manner in which the cervix projects into the vagina, which is at the expense of the anterior wall.

Anteriorly, the vagina is closely connected with the bladder, and the urethra forms a cord-like projection into its wall. The association with the bladder is so intimate as to render it exceedingly difficult to completely separate these viscera. Posteriorly, the peritoneum extends over the whole of the posterior surface of the uterus down upon the surface of the vagina to the extent of from ½ to 1 inch, so that, introducing the finger into the vagina behind the uterus, but ⅓ inch of tissue intervenes between the finger and the peritoneal cavity. The mucous membrane of the vagina is thrown into folds or rugæ, and consequently presents a roughened sensation to the finger. Under

inflammatory conditions they may be lost, so that it presents a smooth, glazed appearance. Below the point of attachment to the peritoneum, we have the vagina closely associated with the rectum, but not so intimately as with the bladder. About 1½ inches from the lower extremity it is separated from the rectum by a muscular structure, which is known as the perineum. The uterus is situated at nearly a right angle to the vagina, so that as the patient stands in an erect position the intra abdominal pressure is exerted upon the posterior surface of the uterus. This pressure drives the uterus against the posterior wall of the vagina.

With this preliminary consideration we can readily see how any rupture of a portion of this pelvic floor or a weakened condition of the muscular structure must exert an influence in the support of the vagina and superjacent structures.

In order to maintain a proper support of the anterior segment of the pelvic floor, we must have its posterior segment in a normal and healthy condition. Now, this segment may be interfered with by any state of health which produces a weakened condition of the muscular system, by causes which increase the intra-abdominal pressure, such as abdominal growths, hypertrophy of the uterus, and so on; or by lesions of parturition, in which a part or the whole of the pelvic floor has been lost. If the perineum, in part or whole has been destroyed, we have to that extent a loss of the resistance to the intra abdominal pressure, so that soon the anterior segment, no longer finding its support, drags downward; with this downward displacement of the anterior wall of the vagina, by the intimate relation already named between it and the bladder, we find the posterior wall of this viscera displaced, and the distress and discomfort of the patient will be increased according to its extent. As the anterior segment sinks below the level of the internal meatus, we find that the bladder is not completely emptied; the retention of a portion of the urine, with the formation of increased secretion of mucus, leads to the development of cystitis and the production of ammoniacal urine. This irritation may lead, subsequently, to deposit of the salts of the urine, forming a calculus.

A protrusion of the anterior wall may or may not be associated with the rolling out of the posterior. The latter is usually accompanied, but not always, with protrusion of the bowel. In those cases in which the uterus has not accompanied the displacement, the traction downward and forward upon the cervix leads the other end of the lever, the fundus, to fall backward until the uterus is parallel in its axis with that of the vagina; when this takes place the intra-abdominal pressure is directed against the fundus and anterior wall of the uterus, increasing its tendency to displacement. The interference with the circulation develops an increased size of the uterus, and by this promotes its further displacement.

In those rare cases in which the uterus is firmly fixed in its place by the maintenance of its normal ligaments, or where inflammatory conditions have shortened the ligaments so that it cannot be displaced, the traction of the heavy vaginal walls leads to the production of a condition which is known as hypertrophic elongation of the cervix. In such cases we may find the os forming the centre of a protrusion, and suppose that we have to deal with a prolapsus uteri. Careful examination, however, discloses the fundus of the uterus in its normal position, and the cord-like continuation between it and the cervix shows that the latter has been drawn out under the influence of traction. This is a form of trouble most difficult, indeed, to relieve. In this displacement of the vagina, the cystocele, or rectocele, is readily recognized, and the patient complains of some protrusion from the vulvar orifice when in an upright position, in coughing or in straining. When the protrusion is a cystocele it will be found to be continuous backward from the urethra. When the finger is introduced into the vagina it passes posteriorly to the mass; on the contrary, in a rectocele it passes anteriorly to the projection. In this patient you will notice the projecting portion is from the anterior wall, and that the uterus is but slightly prolapsed.

Upon examining the literature of the subject we find that prolapsus of the uterus and vagina was among the earliest diseases recognized by the ancients. They, however, had peculiar ideas regarding its pathology and the manner of replacing and retaining the organ in place. Thus, we find Soranus criticizing his *confrères* for suspending patients head downward for twenty-four hours; others considered the uterus a sentient body, and attempted to frighten it back into place by placing it in contact with lizards and disgusting insects, or subjecting it to disagreeable odors.

Various pessaries and mechanical means have been used. Some, mechanical means, in the form of tampons, which combined the astringents for their influence upon the mucous membrane or the walls of the structure. These, however, acted upon the principle that the vagina is a retaining power, and when it was contracted the uterus was held up by it. All these mechanical means, whether in the form of tampons or pessaries, act by so dilating the upper part of the vagina that it, together with the dilating body, cannot slip through the inferior pelvis or the orifice of the vagina; in cases, however, in which the outlet of the vagina has been greatly lacerated or enlarged, it is difficult to maintain a foreign body of this character in place; and in other cases, what little elasticity the vagina may still retain is lost through the distending influence of the foreign body. A variety of surgical procedures have been devised, as the application of caustic agents to the surface, producing sloughing and the subsequent contraction of the vagina. Dieffenbach applied forceps to the vagina, grasping folds of the tissue, which were permitted to remain until the tissue sloughed away. Introduction of a ligature encircling the vagina, drawing this tight, and in this way creating vaginal stricture, closing the perineum, imprisoning the uterus and vagina within the canal with alternate gold and silver rings, were plans practiced.

All of these methods of procedure, however, fail to support the vagina throughout its whole length, permitting the heavy organ to press upon the vulvar outlet, and permitting absorption of what union has been gained. Marion Sims recognized the importance, in any operative procedure, of retracting the anterior wall of the vagina. This he did by freshening the surfaces in the shape of a letter "V" and bringing the arms of the "V" together; this resulted in holding the uterus up, forming a sulcus in the anterior wall, into which the cervix would sometimes slip and give rise to pain and discomfort to the patient. To obviate this, Emmet freshened a surface upon the upper part of the "V," so that he had but a slight opening left. Other forms of denudation have been practiced. In the patient we operated upon to-day we make a star-shaped denudation, or a vertical and lateral bar crossing each other, and bring these together so that we have a vertical and horizontal line of sutures; in this way we retract the vagina laterally and vertically, and take up the tissue that has been so abundantly displaced outward. This operation alone, however, would be a failure, and must be supplemented by one upon the perineum in such a way as to bring the posterior segment in contact with the newly replaced anterior segment, thus imitating the normal condition of the vagina. Having freshened a triangular surface upon the posterior commissure, deep sutures are introduced and the mucous membrane is brought together by a continuous suture, to make certain that the union is complete from within.

This patient will be kept quietly in bed, fed on an animal-broth diet, avoiding the use of milk on account of the casein it contains. After forty-eight hours the vagina will be irrigated twice daily, with an acid sublimate solution. The perineal sutures will be removed at the end of one week; the sutures in the vagina will be permitted to slough out themselves. As you have noticed, we have used silk in the whole surface, so that she is not likely to experience any discomfort from them. By this plan of procedure we confidently expect to remedy the distress from which she has been suffering, and to make her a well woman.

## ORIGINAL COMMUNICATIONS.

### *A SYNOPTIC REVIEW OF THE PHYSIOLOGICAL AND THERAPEUTIC ACTION OF ARSENIC.*

By EDWARD STERNE SHARPE, M.D.,
SALEM, NEW JERSEY.

IN an excerpt from Le Progrès Médical of July 27, 1889, in THE MEDICAL BULLETIN of November last, it is stated that "at a meeting of the Academy of Medicine, July 16, 1889, M. Marty read a note of M. Ballaud, according to which Roussin had announced, in 1863, that arsenic is deposited in the bones, taking the place of phosphorus," which was suggested by a communication of M. Bruardel "upon the subject of arsenical chronic poisoning," the latter confessing his ignorance of said osteo-chymic metamorphosis, as it was not "mentioned in the book M. Roussin had written in collaboration with Tardieu."

Although the consequences of the prolonged administration of arsenic upon the human system, and also observations of the symptoms in cases of severe poisoning, either intentional

or accidental, have become familiar topics, the details of which are described in the text-books and published lectures of various authors accessible to the student, together with its physiological and pathological effects, as demonstrated by experiments upon man and the inferior animals, when we consider that the peculiar interchange alluded to above is practically ignored by almost all writers, it is not surprising that M. Bruardel, his resources limited to a single monograph, was not apprized of that substitution, *à propos* of which, *inter alia*, I take the liberty of asking space in your instructive columns.

Prof. Adolph Gubler, in his lectures upon arsenic, discusses this matter more fully than I have seen elsewhere. He there states that M. Paul Thenard, proceeding to experiment upon the dogma of the substitutive action of this drug, as promulgated by Roussin in 1863 and corroborated by himself in 1865, had added the tribasic arseniate of lime to the food of certain young animals after they were weaned, and, having afterward killed them, he found in "the new layers of the bony tissue the tribasic phosphate of lime was replaced by the tribasic arseniate," thus confirming not only his own theory and that of M. Roussin, but also "the great law of substitution advanced and defended by M. Dumas."

This vito physical transposition can, of course, happen only where phosphorous naturally exists, and, as the phosphatic salts are found in all the tissues and humors of the economy, the correspondently extensive affinities therein implied would explain the wide range of the agency, curative as well as toxic, of this interesting substance; and as its elimination from combination *in situ* is regulated by the longevity of the parenchyma of the organs where it may have usurped the place of the homologous element, it is to be sought for with reliance in them, particularly the nervous and osseous systems, and in the latter may be detected after the softer textures have entirely disappeared,—a circumstance of importance in criminal jurisprudence, as regards the innocence or guilt of one accused of crime committed long before,—although the antiseptic preservation of the gastric parietes usually suffices, together with other physical signs, to sustain incriminating charges.

Moreover, the tegumentary decidua are in evidence of its wide dissemination and prolonged extraneous residence, Professor Gubler having disengaged it from the hair eight months after the date of the ingestion of the ratsbane with suicidal intent. In this instance the quantity taken was enormous, and when, after several weeks, the poison was no longer found in the urine, it re-appeared immediately under depuration from potassium hydriodate, in quite moderate doses.

When given medicinally, the renal function being normal, accumulation to any great extent rarely occurs, it being rapidly excreted through the urinary channels, having been found in the urine of individuals accustomed to taking it shortly after an unusually large amount was swallowed; hence the importance of inquiring into the condition of the kidneys when we prescribe arsenic; if they are free from degenerative change it may prove beneficial, otherwise toxic symptoms may arise and demand a suspension of the treatment.

Although the chemico-vital reaction of arsenic with phosphorus in the living organism seems to admit of proof, the manner thereof, equally with that of its general constitutional action in health and sickness, is involved in obscurity. We see the result, but the process is not revealed to us; therefore, its esoteric operations become a matter of conjecture. Of the numerous theories advanced, some are remarkable for the imaginative fertility they evince, as that of M. Padey, who (in popular fashion) solves the problem as regards pernicious anæmia "*en montrant que les leucocytes peuvent être considerés comme des parasites, les arsenicaux a dose modéré les attaquent en respectant les hématies*,"—a supposititicus discrimination not unlike that formerly spoken of as "almost intelligent" between sound and diseased structures likewise ascribed to this agent, when used externally as a caustic by means of the arsenical pastes, but now known to be due to the feeble resistance of the neoplasm from deficient vascularity, causing it to succumb before the adjacent healthy parts, which, being plenteously furnished with vessels and blood that absorb and remove the redundant poison before its characteristic effects can be produced, remain unaffected.

M. Lemarie Piquot recommends it, "*contre les congestions appoplectiques*," without further comment, except some statistics of cases where he supposed it the cause of improvement, him-

self included in the category, although (had he been aware of them) allusion might not have been deemed irrelevant, to the histological changes already mentioned, resulting from the introduction and incorporation of this element in the cerebrum (as in the osseous skeleton), protracted and made permanent by continued dosage, obviating degenerations to which that organ might be from idiopathy predisposed.

In his formulated system of arsenical medication for intermittent fever, M. Boudin does not favor us with the *ratio medendi;* yet here the theory of M. Padey, with slight modification, would apply, simply by diverting the cytocidal proclivity of the arsenic from the leucocytes toward the protophytum held by some to be the etiological factor in ague; and (were the above hypothesis true), could it escape from the albumen and plasma in which we are told it is incarcerated whilst in the circulation, there would be ample scope for such antagonism, no form of organic life, with one exception, surviving its mortal touch, under certain circumstances the blood itself not escaping, even that vital fluid feeling its baneful presence, as shown by its sinister effect on the hæmoglobin, embarrassing the function of hæmatosis, and impeding tissue-respiration and the progress of the current through the capillaries, and so, probably, causing the effusion constituting the specific anasarca, which occurs when, for whatever purpose, it may be indiscreetly taken.

We must, however, acknowledge our ignorance of these occult matters, and admit that in them, as in cutaneous diseases, in asthma, in dyspnœa, in chorea, in angina, in gastralgia, in ague, in neuralgia, in rheumatoid arthritis, in chronic adenitis, and in intestinal catarrh, its use is purely empirical, the therapeutic *rationale* being unknown.

It is said that during arsenical treatment for chronic squamous eruptions, deposits of this metalloid become visible upon the inflamed surfaces, and cures have been credited to that circumstance, to an ὅμοιος πάθος from its specific phlogosis, which, superseding the pathognomonic, modifies it to the end of its ultimate disappearance; a surmise fortified by the not infrequent sudden aggravation and subsequent amelioration of these diseases, following the adoption of this potent medicament for relief, together with its well-known local action in intractable ulcerations; as in onychia maligna and indolent ulcers of the inferior extremities, when pledgets of lint, saturated with Fowler's solution, are applied, an eschar forms, which, being detached, a healthy, granulating surface remains, that speedily heals.

But as a peptic tonic we have a clue to the secret, and it becomes apparent that arsenic, by facilitating the concoction and assimilation of the food, can be of indubitable service in anæmia and the debility incident thereto; indeed, the improved appetite and eupepsia it occasions readily explains the respiratory tonicity and muscular strength of the arsenicophagi of Carniola and Styria, as observed and described by Tchudi and others; also, the heightened complexions and *embonpoint* of those of the gentler sex who resort to it amongst their cosmetic juvantia. Unfortunately, these flattering concomitants are not only factitious, but transitory, and disappear with the withdrawal of the drug, the robust aspect of persons during a course of arsenical medication being probably largely due to the œdema arsenicalis, as when treatment is interrupted or stopped a changed and haggard appearance quickly ensues, an emaciation caused by the rapid absorption of the effused serum held in the connective-tissue of the muscles of the face and neck.

The illustrious predecessor of Professor Gubler, the profound and eloquent Trousseau, "*in verba magistri jurare,*" admits the good recorded of arsenic when properly taken, but affirms that simultaneous active exercise in the open air is requisite to produce it, as with cod-liver-oil and other hystogenetic analeptics; he also indirectly intimates that minute doses of it may prove advantageous in chronic digestive disorders, by asking whether the alterative action of certain natural mineral springs, hitherto attributed to their alkaline ingredients, might not in reality result from the infinitesimal modicum of arsenic then recently detected in them,—an inference worthy of consideration, in its relation to hygiene and the salutary consequences of its imbibition in extremely dilute solution, as found in the waters of the surface of the earth.

Sulphur has also been accused of "stealing the thunder" of arsenic, from the frequency with which the latter has been found combined with it as an adulterate,—a charge doubtless unwarranted, yet showing the estimation in which it (the arsenic) is held when administered in imperceptible quantity; and, though it may be prized more highly than sulphur in cutaneous

and other diseases when introduced through the primæ viæ, employed externally, the latter claims our unreserved confidence, its virtues having been recognized for centuries; since, as Alibert remarks, "*Naaman ce chef des troupes de Syrie merveilleusment queri par le prophete Elisee pour s'être baigne sept fois dans les flots sulphureux du Jourdain,*" until the present day, and it will scarcely fail to reward the physician who prescribes it, alone or combined, in baths or by inunction, especially the latter, not only in scabies in which it is regarded a specific, but also in prurigo, scaly eczema, and psoriasis, palliating and accelerating the cure by its emollient, sedative, resolvent, and antipruriginous properties. In the latter affections some form of arsenic should at the same time be given by the mouth, the consensus of contemporary dermatological judgment being in its favor.

As regards its topical employment as a corrodent in the carcinoses, M. Lebert, in his "Traité Pratique des Maladies Cancéreuses," while granting the conservative action of arsenic as an escharotic in chancroid ulcerations, denies that in true cancer it is of any radical service, and promises to prove it, "*Mais nous prouveron bientôt que les ulcérs que l'on guerit par la pâte arsenicale ne sont pas vraiment cancereux et que'en outre son action locale est purement caustique.*" Gubler, however, dissents from this estimate of it as a caustic. He says: "It is not a caustic substance, but produces a scar like a caustic; it does not produce an eschar by carbonizing the substance of an organ or by transforming it into zantho proteic acid or into a soap, it kills it." Also, "the eschar produced by arsenic contains the histological elements of the tissues, when, on the contrary, the eschar has been produced by sulphuric acid; nothing remains but a magma without form."

When we attempt to speak from the book of the protracted administration of arsenic, we realize the dearth of information upon this important phase of our subject; and although there is enough and to spare of literature on its tentative use, for the relief and cure of acute and chronic ailments, we find little to enlighten us in respect to its sequelæ, if any, when given in moderate doses for months and years, without intermission or change, in the quantity prescribed.

Although the mountaineers of the Tyrol, already alluded to, are reputed to eat arsenic for long periods, or during life, in astonishing quantities and with equally astonishing results, there seems to be considerable discrepancy of testimony regarding its actual effects, even upon them; and, admitting that some persons can take it in relatively large doses with impunity, as they are said to do in health, as a general tonic, its consequences, under such circumstances, though interesting, are unimportant in our consideration of it, in morbid states of the system. Its chronic (toxic) signs are, however, readily observed, and, when appearing, demand its immediate cessation. They consist of an accelerated pulse, a metallic taste, œdema of the eyelids, congestion of the conjunctiva and psorophthalmia, præcordial distress, anorexia, nausea; silvery tongue, from mucous slime; diarrhœa and colicky pains, caused by gastric and intestinal irritation; restlessness during sleep, frightful dreams; dry, furfuraceous skin; eczema and prurigo arsenicale, loss of sexual appetite and power, impaired memory, paralysis, progressive emaciation and weakness, and finally death.

Many of the above disorders, when arising spontaneously, are counteracted by this very remedy which, under other circumstances, will produce them,—a therapeutic fact now well authenticated, and of broad application to analogous symptomatic conditions.

Arsenic is one of the most reliable weapons we possess, in combating many of the diseases of children, to whom it is peculiarly applicable; they bear it well, and as it is tasteless, and may be given in plain or sweetened water, there is never any difficulty in inducing them to take it; they appear to enjoy complete immunity from its deleterious consequences, an infant at the breast taking it in the dose of 2 minims without inconvenience, and little, shrunken, puny, weak, cadaverous, and aged looking babies become marvelously healthy, rosy, and strong, under its sanatory manifestations.

At whatever age it may be given, the proper time is, invariably, directly after meals, as it is then taken up by the lacteals, and by way of the thoracic duct enters the general circulation, thus avoiding the liver (the organ, according to Ludwig, that confines and conserves it the most and the longest, after its internal use has been discontinued), which, in the intervals of digestion, it would otherwise reach through the vena portæ, and there be arrested.

An additional reason for giving this active

irritant on a full stomach is, to protect the delicate villous tissue of that viscus from its local action, and so escape mischief, which might interfere for a time with a continuation of the treatment.

The stomach, that common receptacle, indisposed from the nature of its functions to resent irritation, and so unsusceptible to inflammatory processes that idiopathic gastritis has been denied, is peculiarly sensitive to arsenic, and, curious to relate, exactly the same lesions are produced upon its internal surface when the poison is used at a distance on the exterior of the body, as when placed directly in contact with it; this is explained by the fact that it is an eliminant, physiologically, of the mucous lining of the alimentary canal, and so largely and in such a concentrated form is it there expelled, when a toxic quantity is even remotely applied, that its erosive action falls completely and fully on that membrane, and destroys it.

As an alterative tonic arsenic has few superiors, and as an antineuralgic is considered infallible (to which hereafter reference will be made) in gastralgia and supra-orbitar neurodynia; but it is in certain subacute and chronic exanthems of the cuticle and corium that it is deemed, when given internally, remedially, a *sine qua non;* nor will it disappoint the practitioner who prescribes it intelligently in lepra, psoriasis, and scaly eczema. It is also of service as an adjuvant in prurigo, and the disagreeable nocturnal itching of the skin of the lower extremities of gouty subjects during attacks of indigestion.

Hunt, who has probably used it more extensively and tested it more thoroughly than any other person, declares that a chronic cutaneous eruption which does not yield to arsenic is of syphilitic origin, and that all different chrono-phlogodes of the common integument will assuredly vanish before it, if given sufficiently long, and in requisite doses, scouting the idea of injurious consequences from its continuous and heroic use.

This sweeping commendation should, however, be received with caution, the experience of others not sustaining his sentiments, at least, of the innocuous nature of the drug; and we know that some individuals, from idiosyncrasy, can take it only in the minutest quantity, which, nevertheless, is usually quite sufficient, in these anomalous cases, to accomplish the purpose for which it may be given.

Alibert, singularly reticent regarding his personal experience with arsenic in affections of the skin, quotes some astonishing cures of elephantiasis, not only by it, but also by other methods, one as unique as, perchance, in part agreeable, being an exclusive diet of the indigenous reptilia and turtles (conjoined with frequent sand baths), during a sojourn upon some utopian island where they abound; a gastronomic healing, as regards the amphibian tortoise, the most fastidious gourmet might not scorn, but rather envy those for whose recovery it might have been adjudged the mode of cure; though, peradventure, the saurian and ophidian *entrées*, the flesh of lizards and vipers, included in his *menu* might be repugnant to the pampered and *exigeant* taste. As for myself, should a leprous fate await me, commend me to the turtle-soup and steaks; the baths, the lizards, and the vipers I could forego, but, otherwise, quite irresistible would be the toothsome regimen in vogue upon that desert isle.

Rayer confirms the favorable reports of Fowler, Adair, Girdlestone, Willen, and Bateman, Bardely, Rush, Coxe, Otto, Fodéré, and others, emphasizing the belief that arsenical preparations are "*d'une utilite incontestable dans plusieurs maladies graves de la peau;*" adding, that the initial dose should be small and the digestive apparatus in good condition, when it may be essayed.

But whatever merit may be imputed to it, in what he terms "*la résistance déplorable*" of cutaneous diseases, in frontal neuralgia, and chorea, arsenic is *facile princeps*, and surely is entitled to the rank of a specific; the intermittent type of the former yielding to it promptly and surely, while the latter, in all its phases, is subdued by its judicious use, it alone being needed; while other forms of neuralgia may require other analgesics, according to location and nature, the periodic paroxysm of the supra-orbitar needs only the solution of Fowler, in 10-minim doses, t.i.d., to give immediate and permanent relief, its therapeutic action being similar to that displayed when it is employed against the paludal intermittents, compelling the inference that one cause produces alike the ague and the pain.

It is well known that persons habituated to the atmosphere of malarial districts, although no longer obnoxious to the quotidians and tertians which strangers encounter, are yet

subject to attacks of "brow ague," which, though not so prostrating as the spasmodic and pyretic outburst, is, notwithstanding, by reason of its torture, *dolor frontalis atrox*, eloquent in craving means which may antagonize and prevent its recurrence, and, while cinchona is the agent *par excellence* "to break" the miasmatic seizure, it is ordinarily impotent to cure neuralgia of the frontal branches of the trigemini, for which the arsenical solution is competent and may always be relied upon with certainty to do.

The peculiar increase and diminution of the painful crisis, the rise and fall, as it were, of the wave of suffering, marks relationship to the irregular movements of the shaking ague, as well as to the clonic spasms of chorea (a muscular inco-ordination beyond the control of the will, sometimes powerful enough to throw a child from the couch upon which it is vainly striving to repose), the choreic jerkings, the algid shiverings of ague, and the neuralgic exacerbations and remissions being convulsive expressions, general or partial, doubtless etiologically the same, if "*natura morborum curationes ostendunt*" be considered an aphorism of practical purport (in this era of scholastic subtleties and speculative research), shown by the curative power of arsenious acid in intermittent fever, intermittent neuralgia, and St. Vitus's dance.

The limit of this paper permits but a cursory review of the many disorders where benefit accrues from arsenic, in which, in concluding, I would include the neuroses generally, especially nervous asthma and angina pectoris, when given steadily as a prophylactic during the intervals of the attacks; and the distressing dyspnœa of the last stages of phthisis, where it is a precious boon, relaxing inspiratory spasm and favoring the thoracic automatism, which may continue until the final moment, now so near; also, those rare cases of temporary mental alienation and eccentric conduct, at times simulative of hysteria, or epileptiform, alternating with cephalalgia, and recurring at regular intervals after a definite period of moral and physical exemption, occasionally met with in marshy localities.

Contemplating these phenomena, the mind reverts to obsolete schools and tenets; with Broussais we see the equipoise held by the functional balance broken, and the reciprocal sympathies and metastatic correlations of the solidists and humorists appear before us, to impress us with a not unfavorable contrast of the old time with the new.

In the study of the cause, progress, and termination of these aberrations, we discern the malarial intoxication and the advancing neurasthenia and neurotic erethism resulting therefrom, while the cure by the physiological influence (tonic and stimulating) of arsenic points to a specific central adynamia as fundamentally causative of all; and, as the highest function of the ganglion-cell is inhibitory, regulative of nervous energy, and preventive of explosions, algetic, convulsive, or maniacal, its *vis vitæ* normal, being indispensable to the proper exercise thereof, we assume, from the salutary action of the remedy under consideration in such perturbations, by the mental equilibrium preserved, muscular movements controlled, and pains subdued, that it possesses recondite properties, be they what they may, be they tonic, stimulating, sedative, or alterative, which, in some inscrutable manner, reaching that blastodermic molecule, impart to it the vigor, the primordial force, which, being impaired, is insufficient then to govern or restrain; but as here we are agnostic, likewise in other morbid conditions, its *modus operandi*, as stated, is equally unknown, whether by immediate contact, nervous transmission, or sympathy, whether as a corroborant by its primary impression, through the peptic glands, on the process of chylopoietic digestion (that veritable resuscitation from death to life), promoting general nutrition, molecular and somatic; or, with the products of that regeneration entering the *vasa lactea*, and thence the living stream of blood, where, though *per se* a bane, it may prove antidotal to some plasma virus, or, finally (returning to the premiss), possibly by a vicarious substitution of this ἄρσην mineral, the nascent lustre of which, in different lights and shadows, mirrors alternately its dual qualities, lethal or vital, toxic or alexipharmic, malignant or benign.

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DIAGNOSING THE CASE.—The doctor found the patient raving in a paroxysm of incipient delirium.

"Did your husband receive any bad news, any great shock just before he was attacked?"

"No; the only thing he got was a gas-bill."

"Ah, yes," said the physician, with a supernatural intelligence, "a case of bill-ious fever.

## GUAIACUM AS A PURGATIVE.

By WILLIAM MURRELL, M D., F.R.C.P.,
Physician to the Westminster Hospital, London.

IN our thirst for new remedies there seems to be a danger that some of our good old-fashioned drugs may be forgotten. Take guaiacum, for example. In most of our text-books on materia medica we are told that guaiacum-resin acts as "a stimulant, diaphoretic, and diuretic." I cannot find that there is much evidence in support of this view. Wood, of Philadelphia, seems to be of the same opinion, for he says: "Guaiacum is believed by some to act as a diaphoretic, and to do good by increasing the elimination of the skin; but as I have not been able to obtain, either from medical literature or from the exhibition of the medicine, any distinctive proof of its having any such action to any marked extent, I have preferred to consider the drug as an alterative." Schmiedeberg, of Strasburg, curiously enough deals with it under the head of "Drugs and preparations used for all sorts of purposes, but now mostly antiquated and obsolete." I am inclined to think that its main action is as a laxative or purgative, and this view is evidently shared by Dr. C. D. F. Phillips, who, in his well-known work on the "Vegetable Kingdom," states that in large doses it produces "dryness in the mouth, burning in the throat, a sensation of heat in the stomach, loss of appetite, heartburn, flatulence, nausea, vomiting, and purging." My attention was drawn to the subject some two years ago by casually prescribing for a city man suffering from rheumatism some guaiacum lozenges made up with black-currant paste. He continued taking them long after the pains had ceased, and his explanation was that they did him good by acting on the liver and bowels. He said that 1 or 2 of the lozenges taken in the morning before breakfast acted promptly and without inconvenience. I ordered the lozenges for other of my patients suffering from constipation, and what is conventionally called "biliousness," and the result was equally satisfactory. The lozenges not being available for hospital use, I had a confection prepared containing 10 grains of guaiac-resin to a drachm of honey. This was curiously popular with the patients, and for the last two years I have used it extensively, not only as a purgative, but in the treatment of chronic rheumatism, sciatica, tonsillitis, dysmenorrhœa, and allied affections. The confection is nasty, but is appreciated by patients. At first I gave it in drachm doses once a day, but they were not satisfied with this, and I had to increase the dose to 2 drachms three times a day. In this quantity it seems capable of producing the maximum of inconvenience and discomfort, and gives unlimited satisfaction. The purgative effect is very pronounced, and in one case the patient had 56 evacuations in the week.

In another case it produced a well-marked rash, covering the arms and legs with an eruption which forcibly reminded one of copaiba. That this rash is rare may be gathered from the fact that my colleague, Dr. C. T. Fox, had seen only one similar instance. It was accompanied by intense itching, which disappeared on discontinuing the drug. The guaiacum not infrequently gives rise to a burning sensation in the throat, and to obviate this I prescribed the 10 grains of the resin in ½ ounce of extract of malt, which answered admirably. This method of treatment is, perhaps, simply a return to the old-fashioned "Chelsea Pensioner," which consisted of guaiacum, rhubarb, ginger, sulphur, and certain other ingredients; but it is interesting, nevertheless. I am sure that a trial of the guaiacum-resin as a laxative or purgative according to the dose employed will be found satisfactory. It is possible that if the drug were triturated with cream of tartar, sugar of milk, or some other equally inert substance, its efficacy would be increased, and it would produce the desired effect in smaller doses.

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## THE CURABILITY OF CONSUMPTION.

By FRANK WOODBURY, A.M., M.D.

IF there is one fact upon which there is complete unanimity of opinion in the pathology of phthisis pulmonalis, it is that prevention is better than cure. If there is one therapeutic observation upon which there is universal agreement, it is that the earlier in the disease the treatment is instituted, the greater the chances of recovery. In fact, if patients submit to rational scientific treatment in the very incipiency, before the anatomical changes have become serious and the interruption to physiological function correspondingly severe, the prospects of recovery are very good; the

great majority of such cases can be restored to health by the means now at the command of scientific medicine and sanatory science. It is also generally acknowledged as a clinical truth established by abundant experience, that, as the disease progresses, making greater inroads into tissues and functions, the prognosis becomes steadily less favorable, although not entirely hopeless, until the lungs are riddled with cavities and the system profoundly poisoned by the toxic principles proceeding from tubercular suppuration.

To the question, "Is consumption curable?" the reply must be "yes, in probably the greater number of cases if taken in time." The tubercular process may be arrested, the general nutrition may be improved and the troublesome symptoms made to disappear—on certain conditions. What those conditions are must be determined separately in each individual case. It has been said that the consumptive is a physiological bankrupt. He does not, however, become bankrupt all at once, but by a comparatively slow process, and, to keep up the illustration, it is easier to re establish him before he has made large inroads upon his resources than when he is physiologically a complete wreck. The causes of phthisis are well known, and in many patients they stare the physician in the face. Unfortunately, it is not in the power of either the sick man nor his medical attendant in very many cases to change them and to remove the former from their malign influence to a better environment. Among all the causes of consumption, there is none other so prominent as poverty, and all that it entails of insufficient and improper food, unseasonable clothing, and unhealthy homes. Ignorance and filth are prolific causes of disease, and children born and bred under such auspices are deficient in vitality; if they survive the trials of infancy they are apt to perish later with tuberculosis or scrofula. It is quite possible, however, by removing them from such unsanitary surroundings and supplying them with a wholesome food, with exercise in the fresh air and other essentials of health, to give them vitality and strength sufficient to enable them to escape the threatened death from consumption. This has been demonstrated in actual experience many times in the observation of practicing physicians, but receives striking corroboration from the experiments of Drs. Sternberg and Trudeau, upon rabbits inoculated with tubercular virus, which recovered in the open field, while their companions confined in the hutches all succumbed to the infection. The cause is different in the various walks of life: in one it may be hardship and exposure; in another, working as a weaver in a damp cellar, or as a spooler in a dusty mill; in still another, the lowering of vital force by losses of blood, from hæmorrhoids or excessive menstruation; in many it is due to venereal excesses. Dr. Thomas King Chambers and, later, Dr. Peter arraign dyspepsia as a prolific cause of consumption, but it is probable that the digestive disorder itself is only an evidence of failing vitality and a portend of the coming disease.

What, then, is the rôle of the celebrated bacillus tuberculosis of Koch? To reply to this question correctly, and in accordance with all the facts, experimental and clinical, it is necessary to recognize two classes of patients with pulmonary phthisis: 1. Those in whom the disease is primary, corresponding with this morbid process produced experimentally in animals in the laboratory by inoculation or by accidental infection, in which there is no predisposition and no pretubercular stage. Such cases rarely occur, but may be occasionally encountered.

2. Those in whom the disease is grafted upon another, and is the conclusion of some common morbid process. Here, as pointed out by Niemeyer, the complication is serious and generally fatal, the tuberculosis in this case being not so much a disease as a mode of dying. To this class, unfortunately, most consumptives belong.

In a communication which Professor Koch made to the Tenth International Congress, he reported that as the result of experiments extending over many years, he believed that he now was able to arrest the tubercular process by the use of certain chemical substances, injected hypodermically, in the form of a lymph. He has since made public more details of his experiments, and the newspapers contain accounts of wonderful results in the case of human beings treated by his method, but he has reserved the secret of the composition of his wonder-working lymph. It will be seen in the telegraphic accounts in the daily papers, of interviews with Koch, that the remedy is a chemical agent, that it is curative only in incipient cases, that repeated injections

are required, that it occasions toxic symptoms suggestive of atropine poisoning, and, finally, that it does not destroy the vitality of the bacillus, but still further lowers the vitality of the tubercular tissue, which must be removed by surgical means or by necrotic process.

If this is all, if this is the outcome of his widely-heralded and much vaunted discovery, we confess that we do not see much in it that will be of real service to our patients; although, the experimental fact that animals inoculated successively with tubercular material and Koch's lymph can escape the effects of the former has much scientific interest, and is important, if true.

Cases of incipient phthisis, as stated at the beginning of this article, are curable by a method advocated by Sydenham, although older than his time, the chief features of which are the proper regulation of life, and especially out-door exercise. This is almost an axiom of medicine. The hygienic method is, in our opinion, for the consumptive, the only road to health, and it is not clear that Dr. Koch proposes to abandon it. If this ancient method be followed, and the patient placed in a suitable environment, the use of powerful toxic agents is unnecessary, the bacilli are overcome and expelled by natural and comparatively safe processes.

At all events, no matter under what guise it may appear, or by what authority promulgated, the secret remedy must be tabooed by an honorable and self-respecting profession; it is equally opposed to the spirit and letter of ethics, and to all scientific procedure and precept.

The public prints, it will be noticed, have assumed an analogy between the inoculation treatment of Koch and vaccination for small-pox, whereas there is no real resemblance between the two procedures, nor between the two affections with which they are connected. It is only necessary to point out a few of the more striking points of difference, in order to show how unlike they are:—

| | |
|---|---|
| VACCINE LYMPH is a pathological product, taken from a vesicle in a living animal. | KOCH'S LYMPH is a chemical substance, probably dissolved in the serum of a guinea-pig |
| It contains bacteria, and is the infectious material from vaccinia, which is a bovine form of variola. | Is claimed to be non-infectious; and is a laboratory product. |
| One inoculation sufficient. | Several inoculations are required. |
| Destroys the susceptibility to disease. | Does not prevent re-infection. |
| Is employed in health to prevent the onset of disease. | Is employed in disease to restore health. |
| Can be used by any one, and when pure is harmless. | Requires skilled operators, and produces toxic symptoms. |
| Is applied to an abrasion. | Must be injected hypodermically. |
| Its manner of preparation and preservation are known, and are under supervision and control. | For the present, at least, requires the use of a secret, proprietary and uncontrolled remedy. |

In conclusion, it may be stated that a radical difference between the two diseases is found in the fact that small-pox is self-protective, and, as the rule, an individual loses his susceptibility by surviving the first attack; on the contrary, an infection by tubercular material predisposes to future attacks, provided the conditions favorable for the outbreak of the disease are present. Notwithstanding the ingenious argument of the elder Flint that phthisis is a self-limited disease, the clinical facts are against it, as recently demonstrated in the able paper read by Dr. William Porter, of St. Louis, before the Mississippi Valley Medical Association, in which this view was completely controverted. For the consumptive, there is no such royal road to health as the community anticipates from Koch's investigations, which recently have led to a brief revival of the cruel and delusive hopes that were warmed into life under the Bergeon craze. The effect upon the profession will probably be to lead them to look with more favor on the method which Bartholow endeavored to popularize, of treating phthisical patients systematically by hypodermic injection, with remedies of established reputation for favorably modifying the symptoms and delaying the progress of pulmonary phthisis.

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## *PRURITUS ANALIS.*

By W. McMURRAY, M.D.

IT has occurred to me, in addition to the numerous causes mentioned in the various text-books, that the "anal glands" round the anal orifice are in many cases the *pons et origo* of this distressing complaint.

Professor Quekett many years ago pointed out these glands and explained their function. They in health secrete an oily substance which lubricates the orifice during the exit of fæcal matter.

In many of the lower animals these glands are better studied where they are developed to a greater degree. In many cases (in the beaver and dog) they are even found extending to the perineum.

When these glands become altered so as to produce a diminished or excessive secretion,

the character of the surrounding tissue becomes altered.

Diminished or absence of secretion causes the orifice to become inelastic, leathery, and is fissured or abraded during the passage of a firm stool, thus acting as an irritant and producing a change in the character of the nerve supplying the part. Hence, in many cases the prominent symptom, itching.

On the other hand, when you have excessive action of these important glands the secretion is profuse, and the patient tells you that he is always moist, which is of a slightly oily nature. (This is not to be confounded with hyperidrosis.) The result of this is, the tissues in the vicinity become macerated, erythematous, and, as a sequela, an eczematous condition.

This condition can frequently be traced to digestive disturbance, and especially dyspepsia of the lower bowel, venous congestions in hæmorrhoids, hepatic congestions, irritation produced by too frequent use of glycerin rectal injections,—in fact, any possible irritant.

The treatment is to remove the cause and endeavor to excite a healthy action of the "anal glands;" regulate diet and hygiene; warm ablutions; electricity; stimulant and astringent local applications, as the case requires. Fluid extract hoang-nan, which has been recommended by Prof. Shoemaker lately in the treatment of diseases of the sebaceous glands, would here deserve an extended trial.

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## SELECTION.

### *A FURTHER COMMUNICATION ON A REMEDY FOR TUBERCULOSIS.**

By PROF. DR. ROBERT KOCH,
BERLIN.

*Introduction.*—In an address delivered before the International Medical Congress I mentioned a remedy which conferred on the animals experimented on an immunity against inoculation with the tubercle bacillus, and which arrests tuberculous disease. Investigations have now been carried out on human patients, and these form the subject of the following observations:—

It was originally my intention to complete the research, and especially to gain sufficient experience regarding the application of the remedy in practice and its production on a large scale before publishing anything on the subject. But, in spite of all precautions, too many accounts have reached the public, and that in an exaggerated and distorted form, so that it seems imperative, in order to prevent all false impressions, to give at once a review of the position of the subject at the present stage of the inquiry. It is true that this review can, under these circumstances, be only brief, and must leave open many important questions.

The investigations have been carried on under my direction by Dr. A. Libbertz and Stabsarzt Dr. E. Pfuhl, and are still in progress. Patients were placed at my disposal by Professor Brieger from his Poliklinik, Dr. W. Levy from his private surgical clinic, Geheimrath, Dr. Fräntzel and Oberstabsarzt Köhler from the Charité Hospital, and Geheimrath v. Bergmann from the Surgical Clinic of the University. To all these gentlemen, and to their assistants, I wish here to express my deep-felt thanks for the active interest which they took in the matter, and for their self-sacrificing readiness to help me. Without this many-sided co operation it would not have been possible to have pushed this difficult and responsible research so far forward in a few months.

*Nature and Physical Characters of the Remedy.*—As regards the origin and the preparation of the remedy I am unable to make any statement, as my research is not yet concluded; I reserve this for a future communication.† The remedy is a brownish, transparent liquid, which does not require special care to prevent decomposition. For use this fluid must be more or less diluted, and the dilutions are liable to decomposition if prepared with distilled water; bacterial growths soon develop in them; they become turbid and are then unfit for use. To prevent this the diluted liquid must be sterilized by heat and preserved under a cotton-wool stopper, or more con-

* Translated from the original article published in the Deutsche Medicinische Wochenschrift and the British Medical Journal, Nov. 22, 1890.

† Doctors wishing to make investigations with the remedy at present can obtain it from Dr. A. Libbertz, Lueneburger Strasse, 28, Berlin, N. W., who has undertaken the preparation of the remedy, with my own and Dr. Pfuhl's co-operation. But I must remark that the quantity prepared at present is but small, and that larger quantities will not be obtainable for some weeks.

veniently prepared with a ½ per-cent. solution of phenol.

*Manner of Using the Remedy.*—It would seem, however, that the effect is weakened both by frequent heating and by mixture with phenol solution, and I have, therefore, always made use of freshly-prepared solutions. Introduced into the stomach the remedy has no effect; in order to obtain a reliable effect it must be injected subcutaneously. For this purpose we have used exclusively the small syringe suggested by me for bacteriological work; it is furnished with a small India-rubber ball, and has no piston. This syringe can easily be kept aseptic by absolute alcohol, and to this we attribute the fact that not a single abscess has been observed in the course of more than a thousand subcutaneous injections. The place chosen for the injection—after several trials of other places—was the skin of the back between the shoulder-blades and the lumbar region, because here the injection led to the least local reaction—generally none at all—and was almost painless.

*Effect of Injections in Healthy Individuals.*—As regards the effect of the remedy on the human patient, it was clear from the beginning of the research that in one very important point the human being reacts to the remedy differently from the animal generally used in experiments—the guinea-pig—a new proof for the experimenter of the all-important law that experiment on animals is not conclusive for the human being, for the human patient proved extraordinarily more sensitive than the guinea-pig as regards the effect of the remedy. A healthy guinea-pig will bear 2 cubic centimetres, and even more, of the liquid injected subcutaneously without being sensibly affected. But in the case of a full-grown, healthy man, 0 25 cubic centimetre suffice to produce an intense effect. Calculated by body weight the 1500th part of the quantity, which has no appreciable effect on the guinea-pig, acts powerfully on the human being. The symptoms arising from an injection of 0.25 cubic centimetre I have observed after an injection made in my own upper arm. They were, briefly, as follow: Three to four hours after the injection there came on pain in the limbs, fatigue, inclination to cough, difficulty in breathing, which speedily increased. In the fifth hour an unusually violent attack of ague followed, which lasted almost an hour. At the same time there was sickness, vomiting, and rise of body temperature up to 39 6° C. After twelve hours all these symptoms abated. The temperature fell until the next day; it was normal, and a feeling of fatigue and pain in the limbs continued for a few days, and for exactly the same period of time the site of injection remained slightly painful and red. The lowest limit of the effect of the remedy for a healthy human being is about 0.01 cubic centimetre (equal to 1 cubic centimetre of the 100th solution), as has been proved by numerous experiments. When this dose was used, reaction in most people showed itself only by slight pains in the limbs and transient fatigue. A few showed a slight rise of temperature up to about 38° C. Although the dosage of the remedy shows a great difference between animals and human beings—calculated by body weight—in some other qualities there is much similarity between them. The most important of these qualities is the specific action of the remedy on tuberculous processes of whatever kind.

*The Specific Action on Tuberculous Processes.*—I will not here describe this action as regards animals used for experiment, but I will at once turn to its extraordinary action on tuberculous human beings. The healthy human being reacts either not at all or scarcely at all—as we have seen when 0.01 cubic centimetre is used. The same holds good with regard to patients suffering from diseases other than tuberculosis, as repeated experiments have proved. But the case is very different when the disease is tuberculosis; the same dose of 0 01 cubic centimetre, injected subcutaneously into the tuberculous patient, caused a severe general reaction, as well as a local one. (I gave children aged from 2 to 5 years one-tenth of this dose,—that is to say, 0.001 cubic centimetre; very delicate children only 0.0005 cubic centimetre, and obtained a powerful but in no way dangerous reaction.) The general reaction consists in an attack of fever, which, generally beginning with rigors, raises the temperature above 39°, often up to 40° and even 41° C.; this is accompanied by pain in the limbs, coughing, great fatigue, often sickness and vomiting. In several cases a slight icteric discoloration was observed, and occasionally an eruption like measles on the chest and neck. The attack usually begins four to five hours after the injection, and lasts

from twelve to fifteen hours. Occasionally it begins later, and then runs its course with less intensity. The patients are very little affected by the attack, and as soon as it is over feel comparatively well, generally better than before it. The local reaction can be best observed in cases where the tuberculous affection is visible; for instance, in cases of lupus: here changes take place which show the specific antituberculous action of the remedy to a most surprising degree. A few hours after an injection into the skin of the back,—that is, in a spot far removed from the diseased spots on the face, etc.,—the lupus spots begin to swell and to redden, and this they generally do before the initial rigor. During the fever, swelling and redness increase, and may finally reach a high degree, so that the lupus tissue becomes brownish and necrotic in places. Where the lupus was sharply defined we sometimes found a much swollen and brownish spot surrounded by a whitish edge almost a centimetre wide, which again was surrounded by a broad band of bright red.

After the subsidence of the fever the swelling of the lupus tissue decreases gradually, and disappears in about two or three days. The lupus spots themselves are then covered by a crust of serum, which filters outward and dries in the air; they change to crusts, which fall off after two or three weeks, and which, sometimes after one injection only, leave a clean red cicatrix behind. Generally, however, several injections are required for the complete removal of the lupus tissue. But of this more later on. I must mention, as a point of special importance, that the changes described are exactly confined to the parts of the skin affected with lupus. Even the smallest nodules, and those most deeply hidden in the lupus tissue, go through the process and become visible in consequence of the swelling and change of color, whilst the tissue itself, in which the lupus changes have entirely ceased, remains unchanged. The observation of a lupus case treated by the remedy is so instructive and is necessarily so convincing that those who wish to make a trial of the remedy should, if at all possible, begin with a case of lupus.

*The Local and General Reaction to the Remedy.*—The specific action of the remedy in these cases is less striking, but is perceptible to the eye and touch, as are the local reactions in cases of tuberculosis of the glands, bones, joints, etc. In these cases swelling, increased sensibility, and redness of the superficial parts are observed. The reaction of the internal organs, especially of the lungs, is not at once apparent, unless the increased cough and expectoration of consumptive patients after the first injections be considered as pointing to a local reaction. In these cases the general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus cases.

*The Diagnostic Value of the Method.*—The symptoms of reaction above described occurred without exception in all cases where a tuberculous process was present in the organism, after a dose of 0 01 cubic centimetre, and I think I am justified in saying that the remedy will, therefore, in future, form an indispensable aid to diagnosis. By its aid we shall be able to diagnose doubtful cases of phthisis; for instance, cases in which it is impossible to obtain certainty as to the nature of the disease by the discovery of bacilli or elastic fibres in the sputum, or by physical examination. Affections of the glands, latent tuberculosis of bone, doubtful cases of tuberculosis of the skin, and such like cases, will be easily and with certainty recognized. In cases of tuberculosis of the lungs or joints which have become apparently cured we shall be able to make sure whether the disease has really finished its course, and whether there be not still some diseased spots from which it might again arise as a flame from a spark hidden by ashes.

*The Curative Effect of the Remedy.*—Of much greater importance, however, than its diagnostic use is the therapeutic effect of the remedy. In the description of the changes which a subcutaneous injection of the remedy produces in portions of skin changed by lupus, I mentioned that after the subsidence of the swelling and decrease of redness the lupus tissue does not return to its original condition, but that it is destroyed to a greater or less extent, and disappears. Observation shows that in some parts this result is brought about by the diseased tissue becoming necrotic even after one sufficient injection, and at a later stage it is thrown off as a dead mass. In other parts a disappearance, or, as it were, a melting of the tissues, seems to occur, and in such case the injection must be repeated to complete the cure.

*Its Action on Tuberculous Tissue.*—In what way this process occurs cannot as yet be said with certainty, as the necessary histological in-

vestigations are not complete. But so much is certain, that there is no question of a destruction of the tubercle bacilli in the tissues, but only that the tissue inclosing the tubercle bacilli is affected by the remedy. Beyond this there is, as is shown by the visible swelling and redness, considerable disturbance of the circulation, and, evidently in connection therewith, deeply seated changes in its nutrition which cause the tissue to die off more or less quickly and deeply, according to the extent of the action of the remedy.

To recapitulate, the remedy does not kill the tubercle bacilli, but the tuberculous tissue; and this gives us clearly and definitely the limit that bounds the action of the remedy. It can only influence living tuberculous tissue; it has no effect on dead tissue, as, for instance, necrotic cheesy masses, necrotic bones, etc., nor has it any effect on tissue made necrotic by the remedy itself. In such masses of dead tissue living tubercle bacilli may possibly still be present, and are either thrown off with the necrosed tissue or may possibly enter the neighboring still living tissue under certain circumstances. If the therapeutic activity of the remedy is to be rendered as fruitful as possible, this peculiarity in its mode of action must be carefully observed. In the first instance, the living tuberculous tissue must be caused to undergo necrosis, and then everything must be done to remove the dead tissue as soon as possible, as, for instance, by surgical interference. Where this is not possible, and the organism can only help itself in throwing off the tissue slowly, the endangered living tissue must be protected from fresh incursions of the parasites by continuous application of the remedy.

*The Dose.*—The fact that the remedy makes tuberculous tissue necrotic and acts only on living tissue helps to explain another peculiar characteristic thereof, namely, that it can be given in rapidly increasing doses. At first sight, this phenomenon would seem to point to the establishment of tolerance; but since it is found that the dose can, in the course of about three weeks, be increased to five hundred times the original amount, tolerance can no longer be accepted as an explanation, as we know of nothing analogous to such a rapid and complete adaptation to an extremely active remedy. The phenomenon must rather be explained in this way, that in the beginning of the treatment there is a good deal of tuberculous living tissue, and that, consequently, a small amount of the active principle suffices to cause a strong reaction; but by each injection a certain amount of the tissue capable of reaction disappears, and then comparatively larger doses are necessary to produce the same amount of reaction as before. Within certain limits a certain degree of habituation may be perceived.

As soon as the tuberculous patient has been treated with increasing doses for so long that the point is reached when his reaction is as feeble as that of a non-tuberculous patient, then it may be assumed that all tuberculous tissue is destroyed. And then the treatment will only have to be continued by slowly-increasing doses and with interruptions, in order that the patient may be protected from fresh infection while bacilli are still present in the organism.

Whether this conception and the inferences that follow from it be correct, the future must show. They were conclusive, as far as I am concerned, in determining the mode of treatment by the remedy, which in our investigations took the following form:—

*The Treatment Applied to Lupus.*—To begin with, the simplest case, lupus; in nearly every one of these cases I injected the full dose of 0.01 cubic centimetre from the first. I then allowed the reaction to come to an end entirely, and then, after a week or two, again injected 0.01 cubic centimetre, continuing in the same way until the reaction became weaker and weaker, and then ceased. In 2 cases of facial lupus the lupus spots were thus brought to complete cicatrization by three or four injections: the other lupus cases improved in proportion to the duration of treatment. All these patients have been sufferers for many years, having been previously treated unsuccessfully by various therapeutic methods.

*The Treatment Applied to Tuberculosis of the Bones and Joints.*—Glandular, bone, and joint tuberculosis was similarly treated, large doses at long intervals being made use of; the result was the same as in the lupus cases—a speedy cure in recent and slight cases, slow improvement in severe cases.

*The Treatment Applied to Phthisis.*—Circumstances were somewhat different in phthisical patients, who constituted the largest number of our patients. Patients with decided pulmonary tuberculosis are much more sensitive to the remedy than those with surgical tuberculous affections. We were obliged to lower the dose

for the phthisical patients, and found that they almost all reacted strongly to 0.002 cubic centimetre, and even to 0.001 cubic centimetre. From this first small dose it became possible to rise more or less quickly to the same amount as is well borne by other patients.

Our course was generally as follows: An injection of 0.001 cubic centimetre was first given to the phthisical patient; on this a rise of temperature followed, the same dose being repeated once a day until no reaction could be observed. We then rose to 0 02 cubic centimetre until this was borne without reaction; and so on, rising by 0.001, or, at most, 0 002, to 0.01 cubic centimetre and more. This mild course seemed to me imperative in cases where there was great debility. By this mode of treatment the patient can be brought to bear large doses of the remedy with scarcely a rise of temperature. But patients of greater strength were treated from the first, partly with larger doses, partly with rapidly repeated doses. Here it seemed that the beneficial results were more quickly obtained.

The action of the remedy in cases of phthisis generally showed itself as follows: Cough and expectoration generally increased a little after the first injection, then grew less and less, and in the most favorable cases entirely disappeared; the expectoration also lost its purulent character and became mucous.

As a rule, the number of bacilli only decreased when the expectoration began to present a mucous appearance; they then from time to time disappeared entirely, but were again observed occasionally until expectoration ceased completely. Simultaneously the night-sweats ceased, the patients' appearance improved, and they increased in weight. Within four to six weeks patients under treatment for the first stage of phthisis were all free from every symptom of disease, and might be pronounced cured. Patients with cavities not yet too highly developed improved considerably, and were almost cured; only in those whose lungs contained many large cavities could no improvement be proved objectively, though even in these cases the expectoration decreased and the subjective condition improved. These experiences lead me to suppose that phthisis in the beginning can be cured with certainty by this remedy.*

*Effect in Advanced Cases of Phthisis.*—In part this may be assumed for other cases when not too far advanced; but patients with large cavities, who almost all suffer from complications caused, for instance, by the incursion of other pus-forming micro-organisms into the cavities, or by incurable pathological changes in other organs, will probably only obtain lasting benefit from the remedy in exceptional cases. Even such patients, however, were benefited for a time. This seems to prove that, in their cases, too, the original tuberculous disease is influenced by the remedy in the same manner as in the other cases, but that we are unable to remove the necrotic masses of tissue with the secondary suppuration processes.

The thought suggests itself involuntarily that relief might possibly be brought to many of these severely afflicted patients by a combination of this new therapeutic method with surgical operations (such as the operation for empyema) or with other curative methods. And here I would earnestly warn people against a conventional and indiscriminate application of the remedy in all cases of tuberculosis. The treatment will probably be quite simple in cases where the beginning of phthisis and simple surgical cases are concerned; but in all other forms of tuberculosis medical art must have full sway by careful individualization, and making use of all other auxiliary methods to assist the action of the remedy. In many cases I had the decided impression that the careful nursing bestowed on the patient had a considerable influence on the result of the treatment, and I am in favor of applying the remedy in proper sanatoria, as opposed to treatment at home and in the out-patient room. How far the methods of treatment already recognized as curative—such as mountain climate, fresh-air treatment, special diet, etc.—may be profitably combined with the new treatment cannot yet be definitely stated, but I believe that these therapeutic methods will also be highly advantageous when combined with the new treatment in many cases, especially in the convalescent stage.† The most important point to be observed in the new treatment is its early application. The proper subjects for treatment are patients in the

* This sentence requires limitation, in so far as at present no conclusive experiences can possibly be brought forward to prove whether the cure is lasting. Relapses naturally may occur; but it can be assumed that they may be cured as easily and quickly as the first attack. On the other hand, it seems possible that, as in other infectious diseases, patients once cured may retain their immunity. This, too, must for the present remain an open question.

† As regards tuberculosis of brain, larynx, and miliary tuberculosis, we had too little material at our disposal to gain proper experience.

initial stage of phthisis, for in them the curative action can be most fully shown; and for this reason, too, it cannot be too seriously pointed out that the practitioners must in future be more than ever alive to the importance of diagnosing phthisis in as early a stage as possible. Up to the present, the proof of tubercle bacilli in the sputum was considered more as an interesting point of secondary importance, which, though it made diagnosis more certain, could not help the patient in any way, and which, in consequence, was often neglected. This I have lately repeatedly had occasion to observe in numerous cases of phthisis which had generally gone through the hands of several doctors without any examination of the sputum having been made. In future this must be changed. A doctor who shall neglect to diagnose phthisis in its earliest stage by all methods at his command, especially by examining the sputum, will be guilty of the most serious neglect of his patient, whose life may depend on this diagnosis, and the specific treatment at once applied in consequence thereof. In doubtful cases, medical practitioners must make sure of the presence or absence of tuberculosis, and then only the new therapeutic method will become a blessing to suffering humanity when all cases of tuberculosis are treated in their earliest stage, and we no longer meet with neglected serious cases forming an inextinguishable source of fresh infections. Finally, I would remark that I have purposely omitted statistical accounts and descriptions of individual cases, because the medical men who furnished us with patients for our investigations have themselves decided to publish the description of their cases, and I wished my account to be as objective as possible, leaving to them all that is purely personal.

DISTINCTION FOR DR. ROSSE.—Dr. Irving C. Rosse, of Washington, has lately had conferred upon him the honorable distinction of F.R.G.S. by election as Fellow of the Royal Geographical Society, through the recommendation of Sir T. Fowell Buxton, Bart., and Mr. George Barclay, of the British legation. The compliment is a recognition of services as traveler and explorer, more particularly in the Siberian Arctic, where the doctor was first to scale Herald Island and to land on Wrangel Land during the search for the exploring yacht Jeannette and the missing whalers.—*Journ. Am. Med. Asso.*

# ABSTRACTS.

AN IMPROVEMENT IN INTERNAL PHLEBOTOMY.—George Harley, M.D., F.R.S., writes to the London Lancet of November 29, 1890, as follows:—

"In your issue of November 1st is an interesting and instructive paper by Dr. Christian Simpson, entitled 'A New Method of Bleeding in some forms of Pulmonary Congestion,' in which he relates 4 cases in which he had practiced it with benefit to the patients. I notice that he alludes to his new method of extracting blood directly from the inflamed lungs as being an extension of the method of performing hepatic phlebotomy which I laid before the profession in 1886, and which led to so much discussion at the time. He has, however, added thereto a suggestion which I deem of so much importance that I desire herewith to call special attention to it, in the hope that others, when practicing either pulmonary or hepatic phlebotomy, will adopt it. The improvement suggested by Dr. Simpson is embodied in the following sentence: 'After the withdrawal of 12 ounces of blood, the canula was held *in situ* with the finger over the end to allow of a clot forming, and then it was slowly withdrawn altogether. A piece of plaster was applied over the puncture, but a flannel bandage could not subsequently be retained in position. The patient was immediately and markedly relieved.' This suggestion of encouraging the blood to form a clot, which will act as a plug, and thus prevent subsequent hæmorrhage, I consider a most valuable one, and I venture to propose a slight modification in the mode of procedure, which will make the plugging of the wound by the coagulum, I believe, still more secure and effective. It will no doubt have occurred to some of the readers of the Lancet that when the stream of blood from the lung has been interrupted by stopping the mouth of the canula with the finger, the coagulum formed within it will be in a continuous mass with the one formed at the distal orifice of the instrument. So that on the withdrawal of the canula there will exist considerable danger of the small blood-clot that has formed between the extreme end of the canula and the lesion made in the tissue by the point of the trocar becoming detached from its surroundings, and withdrawn along with the coagulum inside the

canula, to which it will of necessity not alone be continuous, but likewise intimately adherent. In order to reduce this risk to a minimum, as well as the equal danger of any oozing of blood taking place from the walls of the passage after the removal of the canula, which bleeding would of itself to a certain extent tend to defeat the object held in view, in encouraging the formation of the blood-clot, I propose a simple modification in Dr. Simpson's mode of procedure, which will be equally applicable to cases of pulmonary and hepatic phlebotomy.

"What is wanted is, of course, not only to encourage the formation of an intra-pulmonary or an intra-hepatic blood-clot, but at the same time to insure its fixation in the wound, in order to avoid all risk, after the withdrawal of the canula, of hæmorrhage either into the pleural cavity on the one hand or into the abdomen on the other. My proposal is this: As the trocar has always to be thrust some distance into the tissues of the organ from which it is desired to extract blood, I think before placing the point of the finger on the mouth of the canula, with the view of arresting the blood-flow, it should be slightly withdrawn—say, about half an inch or more—in order to leave an empty passage wherein a sufficiently large blood-clot may form and fill the channel. In which case the surrounding tissues of the organ will, in contracting upon the clot, hold it so firmly by their own resilience that, on the withdrawal of the canula, it will break off from the end of the much larger mass within it, and remain as an effective plug in the wound. This is a point of greater importance in cases of pulmonary than of hepatic phlebotomy. For, while the rigidity of the ribs makes it impossible for one to compress by means of a pad and binder the thoracic walls against the wound-orifice in the lung sufficiently firmly to preclude the escape of blood from it, in the case of the liver, on account of the wound being made in the outer surface and the abdominal parietes immediately over it being freely mobile, no difficulty whatever is experienced in bringing the abdominal walls into firm contact with the orifice of the wound in the liver by the application of a bandage and compress, and thus effectually preventing after-hæmorrhage. However, even in the case of hepatic phlebotomy I think it just as well to recommend taking the additional precaution of preventing, by the induction of the formation of an intra-hepatic blood-clot, any possibility of internal bleeding occurring. Moreover, as, if I am not much mistaken, the day is not far distant when the old-fashioned and unsatisfactory mode of extracting blood cutaneously will be totally abolished in cases of deep-seated inflammation, and internal phlebotomy of deep-seated organs will become a common practice, I should advise operators invariably to endeavor to obtain the assistance of a blood-plug in warding off the danger of internal hæmorrhage after the operation of internal phlebotomy of any deep-seated organ whatever."

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SULPHONAL IN DIABETES.—Casarelli thus summarizes his observations: Sulphonal exerts a favorable influence upon diabetes, gradually lessening the quantity of sugar. The amelioration is evident after the remedy has been used for several days in the daily dose of 1 to 2 grammes (15 to 30 grains). The administration of sulphonal, even if very prolonged, is followed by no evil consequences. In the dose of 3 grammes, long continued, it produces a condition of lethargy, and sometimes delirium. But, if intermitted for a day, or if the dose be diminished, these manifestations cease. If the drug be abandoned the sugar soon re-appears. Casarelli has also made use of antipyrin, but the results were less decided and satisfactory. *Annales de Thérapeutique Médico-Chirurgicales*, September, 1890.

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TREATMENT OF LUPUS ERYTHEMATOSUS OF THE EYELIDS AND THE FACE.—Lupus, in this situation, is characterized by its chronicity, its depth, and generally by its unilateral development. M. Brocq advises the application of a pomade composed as follows:—

℞ Acid. salicylic., Acid. lactic., āā gr. viiss.
Resorcin., gr. xij.
Zinci oxidi, ʒss.
Vaselini pur., ʒivss.—M.

Pyrogallic acid is a very efficacious remedy in the different forms of lupus erythematosus. M. Brocq mentions, as a preparation generally well borne, the following pomade:—

℞ Acid. salicylic., gr. xv.
Acid. pyrogallic., gr. xxx.
Vaselini pur., ʒv.—M.

The latter pomade is applied during the night. During the day the preparation containing resorcin may take its place.—*Recueil d' Ophthalmologie*, September, 1890.

SALINAPHTHOL IN RHEUMATISM.—Salinaphthol is a combination of salicylic acid and naphthol, analogous to salol, which is a union of the same acid with phenol. It is insoluble in water, and has neither odor nor taste. It appears to be as efficient as salol in acute articular rheumatism, and is better borne. In doses of 30 to 50 centigrammes (= 4½ to 7½ grains) four times a day it does not produce headache, buzzing in the ears, or any other symptom of intoxication, even if its use is kept up for a considerable period. Kobert asserts that it is split up into salicylic acid and naphthol by the pancreatic juice and the ferment secreted by the intestinal mucous membrane, and that the presence of salicylic acid in the urine is an evidence of this division. M. Lepine admits that salinaphthol is decomposed by the pancreatic juice, but denies that the intestinal fluid exerts the same influence. But further experiments should be carried on in order to learn whether this action of the pancreatic juice is real or whether salinaphthol, like salol, is split up, not by the pancreatic juice alone, but also by the alkaline constituents of the blood. It seems that salinaphthol should be less toxic than salol, since the naphthol resulting from its decomposition is less deleterious than the carbolic acid formed by the splitting up of salol.—*Journal de Médecine de Paris*, November 16, 1890.

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A NEW SIGN OF CANCER OF THE SMALL INTESTINE.—M. Riegel, watching a patient who apparently suffered from simple dilatation of the stomach, made a number of examinations of the contents of that viscus, and was surprised by the notably different results which he obtained. Sometimes the proportion of hydrochloric acid and the digestive power of the gastric juice were normal. Again, the acid seemed absent, and the juice effected no artificial digestion of albumin. In the latter case the gastric juice was habitually found mixed with bile. The volume of the organ was equally variable. Extremely distended when the acid was lacking, it resumed its normal size when the acid re-appeared. No tumor could be felt upon palpation. It was noticed, however, that the inguinal glands were slightly enlarged. The patient died, and at the autopsy a cylindrical epithelioma of the first portion of the jejunum was found, the duodenum and the stomach being very much dilated. M. Riegel then perceived the explanation of the unusual facts which he had observed. The gastric mucous membrane was healthy. At certain times its secretion was normal, containing a sufficient proportion of hydrochloric acid. But the tumor producing a stricture of the jejunum, the mass of food was arrested in the duodenum and regurgitated into the stomach. The alkaline contents of the duodenum neutralized the acid, and the bile destroyed the digestive power of the pepsin. When the food was thus crowded back into the stomach, that organ became considerably distended. The simultaneous appearance and disappearance of these three signs—dilatation of the stomach, absence of free hydrochloric acid, and intermittent presence of bile—may in the future permit a diagnosis of cancer of the small intestine to be made, even when, as in Riegel's case, no tumor could be detected.—*La Gazette Médicale de Montréal*, November, 1890.

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A PROTRACTED FORM OF ACUTE COCAINISM.—This was the subject of a communication made on the 2d of December to the Academy of Medicine, by M. Hallopeau. The accidents hitherto observed have been divided into two classes, according as they supervene temporarily upon the administration of one or two doses of the drug, or are produced by its prolonged administration. An acute and a chronic form of cocainism have thus been distinguished. From a case which he had studied in connection with Professor Hardy, and several other observations by himself and others, the speaker concluded that the characteristic troubles of acute cocainism might extend over a considerable period and be distressing and prejudicial, if not dangerous, to the patient. The history of M. X. may serve as a type of this protracted form of acute intoxication. It may be briefly given as follows: On the 7th of March, 1890, M. X., about to have a tooth drawn, received from Dr. Serran an injection of about 8 milligrammes (= ⅛ grain) of hydrochlorate of cocaine. At the end of a few moments he experienced, according to the doctor's relation, the often described symptoms of acute cocainism: very painful precordial sensations; a thready pulse, so rapid that it could scarcely be counted, and which might be likened to a tremor of the artery; extreme agitation, and loquacity; he poured

out incessant lamentations with an astonishing volubility, exclaimed that he was about to die, walked with great strides, unconsciously beating the air with his fists. This state lasted for about ten minutes, when he became calm, and the tooth was extracted. The man then arose and walked home, but felt profoundly oppressed, and thenceforth suffered for several months from functional disorders, which rendered his life extremely miserable. These troubles consisted of a constant malaise and headache, an insomnia invincible by narcotics, bad taste in the mouth, attacks of vertigo and syncope, with lively agitation, talkativeness, profound dejection, and presentiment of approaching death. These attacks occurred several times a month. All intellectual labor became impossible; he could not perform the most elementary operation of arithmetic; he was obliged to give up his business; was the victim of profound depression; and he suffered continually from prickling and numbness in his hands and forearms, which he rubbed incessantly. Not until two months after the injection did a gradual amelioration take place, and the symptoms did not entirely leave him till the fourth month. As regards the physiological interpretation of such prolonged accidents of cocainism it may be summed up in the proposition of Professor Hardy: the nervous centres, and more particularly the brain, have been poisoned. It cannot, indeed, be admitted that a single small dose remains in the circulation, but one is led to conceive either that it is stored up in the cells of certain nervous centres, or that it determines persistent lesions. The prognosis of protracted acute cocainism is serious in the sense that the symptoms occasion great suffering to the patient, and may prevent him from attending to business for several months. M. X. asserts that during his illness he would have gladly welcomed death, that he recalls his sufferings with horror, and that for nothing in the world would he again pass through such a moral and physical experience.

The following conclusions were summarized by M. Hallopeau:—

1. A single interstitial injection of hydrochlorate of cocaine may only give rise to immediate accidents of a grave and threatening character, but it may also occasion prolonged and extremely painful troubles. 2. These troubles have much analogy with those observed a few moments after the injection, and consist, above all, in a persistent headache, accompanied by profound malaise, insomnia, numbness of the limbs, and attacks of syncope with vertigo, associated with a cerebral excitement, expressed by loquacity and great agitation. 3. Minimum doses of the medicament may suffice to produce such symptoms. 4. They may continue for several months. 5. They occur particularly in those whose nervous system is very excitable. 6. They may be ascribed to an elective action of the poison upon certain nervous centres.—*La Tribune Médicale*, December 4, 1890.

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Catamenial Toxæmia.—At a meeting of the Academy of Medicine, held December 2d, M. Henrot remarked that intestinal disorders corresponding to the menstrual periods of their nurses were frequently observed in infants. He has met with a case in which an eruption occurred in an infant who had been weaned. The eruption always appeared in the same spot, simultaneous with the suppositious menstrual period during lactation, or with the actual epochs after weaning, that is, after physical dependence of the child upon the mother had ceased. Two months after her confinement the mother had suffered from an eruption, which must have profoundly modified her blood, since that fluid communicated special properties to the milk, which, in its turn, had modified the blood and, therefore, the constitution of the babe for fifteen or sixteen months.—*La Tribune Médicale*, December 4, 1890.

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Peripheral Neuritis in Cancer.—The existence of this lesion has not hitherto attracted much attention. Our knowledge of the subject is still very incomplete and of quite recent date. It was first mentioned by Oppenheim and Siemerling in 1887, and Klippel in 1889 described certain alterations in peripheral nerves, found in subjects of cancer. F. Auché (Revue de Médecine, October 10, 1890) has examined with great detail the peripheral nerves in 10 cases of cancer; in 9 of these he found very distinct lesions, which became more marked in proportion to their distance from the nervous centre. These lesions occupied the most various situations and were of a variable character. A profound alteration or even disappearance of the myeline gave a beaded aspect to the nerve. Sometimes the myeline was transformed into little drops, intermingled with

a greater or less number of nuclei. Often the fibres had become mere empty sheaths. Neither age nor sex has any influence upon the development of these lesions. They were found in persons from 30 to 77 years of age. The seat of the cancer seemed to have no influence. All the cases of cancer of the stomach were accompanied by peripheral neuritis, which was also present in a case of cancer of the pancreas. The same alterations occurred in all the cases of uterine cancer except one. Some of the changes might be attributed to œdema; but, in the majority of cases, either there was no trace of dropsy or the alterations of the nerves existed beyond the œdematous area. The sole cause which seemed influential in their production was the presence of a cancerous tumor. This cause probably acts indirectly through the cachexia determined by the disease in its later period of evolution.—*La Médecine Moderne*, November 16, 1890.

## THERAPEUTIC NOTES.

### CAPSICUM.*

Capsicum is an excellent remedy in flatulent dyspepsia:—

℞ Pulveris capsici, . . . gr. xl.
Extracti nucis vomicæ, . gr. iij.
Extracti pancreatis, . . ʒj.
M. et ft. capsulæ no. xx.
Sig.: A capsule after meals.

A prescription containing capsicum of much utility in debility of the sexual organs is:—

℞ Pulveris capsici,
Extracti erythroxyli, . āā ʒj.
M. et ft. pilulæ no. xxx.
Sig.: Two pills three or four times a day.

The tincture of capsicum is an excellent application to the mucous membrane of the mouth, and especially the gums. It enters into very many tooth-washes, the following, used by Garretson, being very serviceable:—

℞ Tinct. capsici, . . . fʒij.
Spiritus odorat., . . . fʒij.
Alcoholis, . . . . fʒij.
Tinct. quillaiæ, . . . fʒiss.
Tinct. gentianæ comp., . fʒj.
Acidi acetici diluti, . . fʒss.
Acidi carbolici, . . . fmij.—M.

* From the advanced sheets of vol. ii of Shoemaker's "Practical Treatise on Therapeutics," now in press.

Capsicum infusion is used as an application to scarlatinal sore throat, or diluted as a gargle in tonsillitis, pharyngitis, or may be used as a gargle, thus:—

℞ Tinct. capsici, . . . fʒj.
Potassii chloratis, . . ʒiij.
Glycerini, . . . . fʒij.
Acidi hydrochlor. dil., . fʒiij.
Aquæ rosæ, . . ad fʒxij.

Capsicum may be used externally as a hair-lotion for promoting the growth:—

℞ Tinct. capsici, . . . fʒss.
Tinct. saponariæ quil., . fʒj.
Glycerini, . . . . ʒij.
Tinct. cantharidis, . . fʒiij.
Spiritus rosmarini, . . fʒiss.
Aquæ rosæ, . . ad fʒviij.
M. Sig.: Drop on the hair night and morning.

Capsicum is given internally after a debauch, or in cases of drink-craving, as a substitute for alcoholic drinks. In chronic catarrh of the stomach of drunkards, the tincture of capsicum, in 10 drop doses before meals, serves as an appetizer. The tincture of capsicum is a valuable stimulant in delirium tremens. It may very serviceably be administered in beef-tea, and supports the heart, allays restlessness, and promotes sleep. Capsicum, in fact, possesses a slight narcotic power, and can be given thus with marked effect:—

℞ Tincturæ capsici, . . fʒij.
Sodii bromidi, . . . ʒiij.
Elix. lupulini, . . . fʒiv.
M. Sig.: Two teaspoonfuls in water every hour or two.

### BROMIDES.*

A good formula used by the author for gonorrhœa with chordee is the following:—

℞ Potassii bicarb., . . . ʒiij.
Potassii bromidi, . . . ʒiv.
Tincturæ hyoscyami, . . fʒj.
Spiritus chloroformi, . . fʒiv.
Inf. buchu, . . . ad fʒviij.
M. Sig.: A tablespoonful in barley-water every three or four hours. This combination relieves scalding and chordee.

The following are also valuable prescriptions containing the bromides:—

℞ Sodii bromidi, . . . ʒvij.
Antimonii et potassii tart., . gr. ss.
Aquæ camphoræ,
Spiritus ætheris nitrosi, āā fʒiss.
Syrupi aurantii, . . . fʒij.
M. Sig.: Two teaspoonfuls in water every two or three hours until relieved. Serviceable in epididymitis, cystitis, and prostatitis.

℞ Ammonii bromidi
Saloli, . . . . āā ʒj.

M. et ft. capsulæ no. xij.

Sig.: Two capsules every hour or two. Employ in gonorrhœa and all irritable conditions of the genito-urinary organs.

In irritability of the bladder in women who use sewing-machines, or others, the following is serviceable:—

℞ Potassii vel sodii bromidi, . gr. xx.
Infus. uvæ ursi, . . . fʒj.

M. Sig.: Take every hour or two until relieved.

In migraine the combination with opium is valuable:—

℞ Tr. opii deodorat., . . fʒj.
Potassii bromid., . . ʒij gr. xl.
Acid. hydrobromic. dilut., . fʒij.
Syr. aurantii flor., q. s. ad fʒiv.

M. Sig.: A dessertspoonful in water every two or three hours.

The headache of pachymeningitis is generally best controlled by a combination of the bromide and iodide of potassium, as—

℞ Potassii iodidi, . . . ʒiiss.
Potass. bromidi, . . . ʒv.
Syrupi aurantii,
Syrupi simplicis, . . āā fʒij.

M. Sig.: Two teaspoonfuls three or four times daily.

CAFFEINE.*

℞ Caffeinæ citras, . . . gr. xx.
Phenacetin.,
Pulv. aromatic., . . āā ʒss.

M. et ft. chartæ no. x.

Sig.: A powder every two or three hours. Serviceable in migraine and in neuralgia about the scalp, face, and in sciatica.

℞ Caffeinæ citras, . . . gr. xx.
Acetanilid., . . . gr. l.
Ext. cannabis Indicæ, . gr. iij.

M. et ft. capsulæ no. x.

Sig.: A capsule every two to three hours, for neuralgia.

℞ Caffeinæ citrat., . . . ʒss.
Ammonii bromidi, . . ʒiij.
Elix. guaranæ, . . . fʒij.

M. Sig.: A teaspoonful every hour or two until relieved of pain of neuralgia.

* From the advanced sheets of vol. ii of Shoemaker's "Practical Treatise on Therapeutics," now in press.

℞ Caffeinæ citratis, . . . gr. l.
Liquor. potassii citratis,
Spiritus ætheris nitrosi,
Infus. digitalis, . . āā fʒij.

M. Sig.: A half a tablespoonful in water every three or four hours. Employ externally in valvular insufficiency, attended with dropsy.

In weak, dilated heart, with gouty tendency, the following is useful:—

℞ Caffeinæ citratis,
Lithii citratis, . . āā gr. c.
Strychninæ sulphat., . . gr. ¼.
Ol. gaultheriæ, . . . ♏v.

M. et ft. capsulæ no. xx.

Sig.: One every four hours.

℞ Caffeinæ citrat., . . . gr. l.
Tinct. strophanthi, . . ♏lxx.
Aquæ camphoræ, . . ʒiij.

M. Sig.: A teaspoonful three times a day. Use in parenchymatous nephritis attended with dropsy.

INTESTINAL ANTISEPTICS.

The Paris letter in the Medical News says: Let me give you two or three of the most common formulæ used in the Paris hospitals as intestinal antiseptics.

Professor Bouchard recommends the following in cases of gastric and intestinal fermentation, as found in cases of gastric dilatation, in poisoning by decayed or diseased meats, in typhlitis, dysentery, and typhoid fever, and in diseases in which there is insufficient renal secretion:—

℞ Beta-naphthol, finely pulverized, . . . . . ½ ounce.
Salicylate of bismuth, . . 2 drachms.

M. Sig.: Divide into thirty wafers, and give from three to ten daily.

Professor Dujardin-Beaumetz recommends the following:—

℞ Pure bisulphide of carbon, . 35 grains.
Essence of peppermint, . . 30 drops.
Water, . . . . . 15 ounces.

The mixture is placed in a large bottle, shaken, and allowed to settle; eight to twelve tablespoonfuls are to be given daily in half a tumblerful of water and wine, or in milk. Dr. Huchard recommends:—

℞ Salicylate of bismuth,
Salicylate of magnesium,
Benzoate of sodium, āā 75 grains.

M. Sig.: Divide into twenty wafers, one of which is given before each meal.

ACUTE BRONCHITIS.

To allay the distressing cough, soothe the mucous membrane, and to soften the phlegm, that it may be easily removed, give the following:—

℞ Morphinæ acetatis, . . gr. $\frac{1}{20}$.
Potassii acetatis, . . . gr. xx.
M. Sig.: A single dose.

—*Waugh.*

INFANTILE ECZEMA.

Shoemaker recommends externally and internally, in a case at his clinic in the Medico-Chirurgical Hospital, as follows:—

℞ Sulphur. subl., . . . ℥j.
Camphoræ, . . . . gr. x.
Ol. anthemidis, . . . gtt. j.
Creasoti, . . . . gtt. v.
Ung. aq. rosæ, . . . ℥ss.
Ung. zinci ox. benzoat., . . ℥j.
M. et ft. ung.

℞ Sulphur. subl., . . . gr. j.
Ext. malt. fl., . . . f℥j.
M. Sig.: One dose. Repeat thrice daily.

CHRONIC PHARYNGITIS.

℞ Ergotin, . . . . 15 grains.
Tincture of iodine, . . 1 drachm.
Glycerin, . . . . 1 ounce.
M. Sig.: To be applied three times daily, with a soft brush.—*The Canada Lancet.*

INCIPIENT TUBERCULOSIS.

℞ Creasoti, . . . . ♏j.
Syr. pruni Virg., . . . f℥j.
Elix. simp., . . q. s. ad f℥ij.
M. Sig.: One dose. Repeat four times daily.—*Anders.*

APPLICATION FOR ANGINA (H. ROUSSEAU).

℞ Borate of soda,
Chlorate of soda, . each 30 grains.
Pure glycerin, . . . 120 "
Honey of roses, . . . 60 "
M. Sig.: Apply with brush, five or six times daily.—*Journal de Médecine; The Times and Register.*

ANTISEPTIC TINCTURE FOR DIPHTHERIA (OSIECKI).

℞ Tincture of rhatany, . . 150 grains.
Tincture of benzoin, . . 75 "
Tincture of aloes, . . . 45 "
M. Sig.: Apply with brush, three times daily.

After which, the following powder is insufflated:—

℞ Tannic acid, . . . . 30 grains.
Sublimed sulphur,
Chlorate of potash, each 45 "

—*Ibid.*

APPLICATION FOR BURNS OF THE FIRST AND SECOND DEGREES.

℞ Tannin, . . . . . 150 grains.
Alcohol, . . . . 150 "
Sulphuric ether, . . . 1200 "
M. Sig.: Apply with brush.

—*Ibid.*

GASTRIC CATARRH.

℞ Argenti nitratis, . . . gr. j.
Ext. belladonnæ, . . . gr. iv.
Ext. opii, . . . . gr. iij.
Mannæ, . . . . . q. s.
M. et ft. pil. no. xxx.
Sig.: One pill one and a half hours after meals.
—*The Times and Register.*

FISSURE OF THE ANUS.

℞ Boric acid, . . . . 3 parts.
Chlorhydrate cocaine, . . 1 part.
Lanolin, . . . . . 30 parts.

To be used after thorough cauterization of the parts with silver nitrate.—*L'Union Médicale; ibid.*

GONORRHŒAL ARTHRITIS.

℞ Camphor, . . . . 100 grains.
Extract of opium, . . . 75 "
Alcohol, . . . . . 1 drachm.
Extract of belladonna, . . 75 grains.

This is to be made into a cataplasm and applied over the part from ten to twelve hours, the joint being made immobile by proper dressings.—*Journal of Pharmacy; ibid.*

TREATMENT OF FROST-BITE (M. BROCQ).

1. Bathe the hands in a decoction of walnut-leaves; dry.
2. Friction with camphorated alcohol.
3. Powder with the following:—

Salicylate of bismuth, . 150 grains.
Starch, . . . . 1350 "

4. To calm the itching, rub with

Glycerin,
Rose-water, . each 12 drachms.
Tannin, . . . . 2 grains.

Then powder with No. 3.

5. If ulcerations exist, envelop with walnut-leaves soaked in hot water.—*Revue de Thérapeutique; ibid.*

ORCHITIS AND ACUTE HYDROCELE.

Horwitz advises multiple punctures to relieve tension of the effusion; strapping; applications of the ointment of iodoform and belladonna in nervous patients. Internally he prescribes the following mixture:—

℞ Tr. aconiti, . . . . ♏j.
Morphinæ sulph., . . gr. $\frac{1}{24}$.
Antimonii tart., . . . gr. $\frac{1}{12}$.
Magnesii sulph., . . gr. xij.

M. Sig.: One dose. Repeat thrice daily.—*Ibid.*

SUBINVOLUTION OF THE UTERUS.

Dr. B. C. Hirst suggests the following as the best combination to use:—

℞ Strychninæ sulphatis, . gr. $\frac{1}{20}$.
Quininæ sulphatis, . . gr. ij.
Extracti ergotæ, . . . gr. j.

M. et ft. pil. no. j.
Sig.: At one dose.—*Ibid.*

NON-OPERATIVE TREATMENT OF VAGINISMUS (LUTAUD).

Before submitting patients suffering from vaginismus to operative treatment, which consists in the dilatation of the vaginal sphincter during anæsthesia, Lutaud advises a trial of the following curative treatment:—

Introduce into the vagina each night the following suppository:—

Iodoform, . . . . 15 grains.
Extract of belladonna, . 8 "
Cacao-butter, . . . 150 "

For one suppository.

Inject three times daily one quart of hot water, to which is added one teaspoonful of carbonate of soda; then apply the following solution by means of a brush:—

Chlorhydrate of cocaine, . 30 grains.
Distilled water, . . . 1 ounce.

This treatment should be continued for one month. Attempts at coitus should be practiced every two or three days after having applied cold cream to the vulva and penis.

An accouchement very often causes a disappearance of the vaginismus. Lutaud recommends a hypodermic injection of $\frac{1}{6}$ grain of morphine before coitus. The sedative action of the morphine, acting more especially on the genital system, may permit coitus, and often results in pregnancy and, as a result, the cure of the vaginismus.—*Journal de Médecine de Paris; ibid.*

TREATMENT OF TUBERCULAR LARYNGITIS (MOURE).

In the inflammatory form we will confine ourselves to a palliative and antiphlogistic treatment; counter-irritants (vesications or the actual cautery to the exterior of the larynx), inhalations or pulverizations soothing and antiseptic, occasionally emollient gargarisms, and absolute rest of the organ.

If the epiglottis and the extra-laryngeal region are the seat of ulcerations, the gargarisms, or, rather, throat baths, judiciously employed, are useful.

The following gargarism is recommended as being both antiseptic and soothing:—

℞ Iodine (metallic),
Iodide of potassium, . āā gr. 5.
Carbolic acid, . . . ℥ss to gtt. 45
Laudanum (Sydenham), . ℥j.
Glycerin, . . . . ℥iv.

One teaspoonful of the above in a glassful of warmish water, to be used as a gargle three or four times a day.

If the patients object to the disagreeable taste, or if the results are not marked, we can use the following instead:—

℞ Carbolic acid or creasote, . ℥ss to ℥j.
Bromide of potassium, . gr. 45 to 75.
Laudanum (Sydenham), . ℥j.
Glycerin, . . . . ℥iv.

One teaspoonful to a wineglassful of water.

From 7½ to 15 grains of hydrochlorate of cocaine may be added to the above to render it more anæsthetic.

Regarding local applications, they are not well supported, as a rule, as they almost always irritate the larynx; if there is any trouble of deglutition, we may touch the ulcerated parts with a solution of cocaine or of morphine. If, for some reasons, local applications are contra-indicated, the spray of the atomizer may be used for two or three minutes instead.

In the chronic form of laryngeal tuberculosis, if ulcerations exist, besides the pulverizations and inhalations, antiseptic and astringent of the first stage, which may also be employed here, the following solution may be used in the atomizer:—

℞ Chlorhydrate of cocaine, . 4 to 5 grs.
Hydrate of chloral, . . 30 to 45 "
Bromide of potassium, . 30 to 45 "
Glycerin (pure), . . 1½ ounces.
Distilled water, . . . 6 "

To be used three or four times a day, from three to five minutes.

In certain cases we will replace the cocaine by crystallized carbolic acid or by creasote.

In the third stage we make use of a solution such as the following:—

| | | |
|---|---|---|
| ℞ | Chlorhydrate of morphia, . | 4 to 10 grs. |
| | Chlorhydrate of cocaine, . | 6 to 15 " |
| | Carbolic acid, . . . | 15 to 30 " |
| | Glycerin (pure), . . . | 1 ounce. |
| | Laurel-water, . . . | 5 drachms. |
| | Water, . . . . | 9 to 16 ozs. |

To be used in atomizer for two or three minutes; do not swallow.

We may replace the carbolic acid by 45 to 60 grains of bromide of potassium, or hydrate of chloral, according to the indications.

To facilitate deglutition, we may touch the parts with the following solution five minutes before eating:—

| | | |
|---|---|---|
| ℞ | Chlorhydrate of morphia, . | 4 to 8 grains. |
| | Chlorhydrate of cocaine, . | 8 to 30 " |
| | Glycerin (pure), . . . | 7 ounces. |

—*La Gazette Médicale; The Times and Register.*

### WHOOPING-COUGH.

Monti employs the following formula in whooping-cough:—

| | | |
|---|---|---|
| ℞ | Quininæ, . . . . | gr. vi–ix. |
| | Sodii bicarb., | |
| | Sacchari alb, . . | āā gr. xx.—M. |

Divide in chartulas no. x.

Sig.: One powder every two hours.

—*Jahrb. f. Kinderheilk.; Archives of Gyn. and Pæd.; ibid.*

### IRON, GLYCERIN, AND CHLORATE OF POTASSIUM MIXTURE.

| | | |
|---|---|---|
| ℞ | Tinct. of chloride of iron, . | 30 minims. |
| | Chlorate of potassium, . | 1 drachm. |
| | Glycerin, . . . . | ½ ounce. |
| | Water, sufficient to make | 4 ounces. |

Dose for adults, a teaspoonful every two hours; children, twenty drops to half a teaspoonful, according to their age.—*Ibid.*

### BOROGLYCERIN CREAM.

The following preparation is said to be excellent for chapped hands, lips, etc.: Dissolve 1 part of boric acid in 24 parts of glycerin; add to this solution 5 parts of lanolin free from water, and 70 parts of vaseline. The preparation may be colored and perfumed.—*Journ. Amer. Med. Asso.*

### RESORCIN IN NAUSEA.

Resorcin, in 10- to 20- grain doses, is said to be almost a specific for the nausea which follows a spree. In vomiting of pregnancy it also has proven successful when all else had failed. In fact, it may be used to quiet emesis from any source.—*Med. Mirror.*

### WINE OF CASCARA SAGRADA.

| | | | |
|---|---|---|---|
| 1. | ℞ | Fluid extract of cascara sagrada, . . . | 1 part. |
| | | Sherry wine, . . . | 9 parts. |
| | M. Filter. | | |
| 2. | ℞ | Cascara sagrada, . . | 1 part. |
| | | Sherry wine, . . . | 10 parts. |

Macerate for eight days, press and filter.

These wines are administered in doses of a wineglassful and over as a laxative.—*Journal de Maladies Cutanées.*

### PREPARED COTTON FOR BURNS.

| | | |
|---|---|---|
| ℞ | Solution of cocaine (2 per cent.), . . . . | 30 grammes. |
| | Boric acid, . . . | 2 " |
| | Glycerin, . . . | 4 " |
| | Carbolic acid, . . . | 1 gramme. |
| | Absorbent cotton, . . | 30 grammes. |

For the dressing of burns.—*Ibid.*

### ACUTE TONSILLITIS; PHAGEDENIC CHANCROID.

A male, aged 22, of good physique, was admitted to the venereal wards of Philadelphia Hospital suffering with chancroids, which had destroyed the greater part of the prepuce and attacked the glans. He was put to bed and the following lotion applied:—

| | | |
|---|---|---|
| ℞ | Ferri et potassæ tartratis, . | gr. x. |
| | Aquæ, . . . . | f℥j. |

M. Fiat sol.

Sig.: Wash parts every three hours.

Internally:—

| | | |
|---|---|---|
| ℞ | Ferri et potassæ tartratis, . | ℥ij. |
| | Syrup. zingiberis, . . | f℥j. |
| | Aquæ bullientis, . . | f℥v. |

M. Fiat sol.

Sig.: f℥ij t. d.

Under this treatment he rapidly improved. About the sixth day after admission he complained of tenderness and swelling in his throat. Upon examination he was found to be suffering with acute tonsillitis. His temperature was 105.2, with severe rigors. The pus was at once evacuated, and he made a good recovery in a few days. The tinct. guaiac. ammon. was given early as abortifacient without success, though it gave marked relief later. Dose, f℥j in milk as a gargle.—S. T. B., in *The Times and Register.*

THE
# Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
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## *KOCH'S PROPOSED METHOD IN TUBERCULOSIS.*

So great and so deserved is the eminence attained by Professor Koch in the demonstration and study of pathogenetic micro-organisms, so cautious and scientific have been his methods of investigation, so brilliant his results, that any suggestion, opinion, or theory emanating from him is sure to receive respectful consideration from the medical world. The obscure allusion in his address before the Tenth International Congress concerning the possibility of curing tuberculosis was quickly followed by an incomplete announcement upon the same important subject. We lay before our readers in this issue a translation of Koch's paper, which will doubtless be carefully read and considered by all clear and explicit as far as it goes. Modest, moreover, as regards its form of expression, this paper, nevertheless, excites in some respects our wonder. From a scientific point of view, it seems a premature publication, and we are surprised that its author should have nothing to say about the composition of his already famous "lymph." Humanitarianism, a not unworthy desire to establish undisputed priority, or, possibly, the demands of German officialism, may serve to account for the imperfect manner in which his views are presented. But what can explain his silence concerning the nature of his anti-tubercular fluid? It has been intimated that the refusal of Koch's demand for a clinic and bacteriological institute for a prolonged and thorough study of the subject under his own direct supervision prompted his unusual course. We have sufficient faith in the Prussian savant to believe that he is influenced by weighty reasons, and that his secret will at no distant date be promulgated.* We certainly do believe, however, considering Koch's position as a physician and man of science, to say nothing of his professorship in a great German university, that a novel and important method of treatment of the most universal and fatal of diseases should be thoroughly explained to his professional brethren. The liquid presumably contains one or more of the organic products —albumoses, toxines—generated by the growth of the bacilli tuberculosis in a certain medium, dissolved, it may be, in the serum of the guinea-pig, and preserved by the addition of a small quantity of cyanide of mercury. Though, in our total ignorance, it is rash to hazard a conjecture as to composition of a potent and complex organic fluid, yet the course of recent research has been preparing our minds for some such discovery as has now, perhaps, been made. The march of modern science has, in fact, tended in the direction of specific vaccination. From a naturally modified pathological product like Jenner's vaccine lymph, through an artificially modified or "attenuated" virus, the course of speculation and experiment has, during a few years past, been directed toward the possibility of preventing or curing a disease by the injection of certain specific chemical substances produced by the development of the causative bacillus of the disease. And thus, whether the momentous discovery should be made by Professor Koch, Brieger, Bouchard, or some previously unknown worker, like the Koch of fifteen years ago, seemed to depend upon a combination of unknown circumstances. This detracts nothing from the fame of Professor Koch, whose genius we admire, and our remarks are far from being dictated by a spirit of captious criticism.

It is highly probable that the method now introduced will prove a valuable mode of treatment of tuberculosis of skin, lymphatic glands, and bones. In advanced pulmonary disease it is likely to be harmful or even dangerous. The action of this fluid has been most frequently studied in lupus for the reason that the lesions and the operation of the remedy upon them lie open to observation. It is rational to conclude that the vascular engorgement produced in the diseased portion of the skin takes place in the pulmonary tissue, when the lung is the

* Later advices inform us that Koch's reserve was dictated by the Minister of Public Instruction, "who took the responsibility upon himself."

seat of tubercular disease. Since the "lymph" does not destroy the bacilli, but only leads to a separation of dead or dying tissue containing bacilli from the healthy surrounding tissue, it is obvious that surgical interference will still remain necessary. Necrotic tissue, whether it contain tubercle bacilli or not, whether it be the result of Koch's "lymph" or not, must usually be removed by operative procedures. Not much assistance from art is required in the case of lupus, but caseous glands must be destroyed, sequestra taken away, and tubercular joints exsected. The local and constitutional reaction caused by Koch's fluid will assist in the formation of an assured and early diagnosis, will distinguish the morbid from the sound tissue, and lead to the prompt extrusion of the former, thus minimizing the effect of the disease upon the part and system. We are told that in early phthisis, or even after the formation of small cavities, cough lessens, expectoration becomes mucous in character, fever and night-sweats cease, and the bacilli decrease in number and gradually disappear. Within four to six weeks patients under treatment for the first stage of phthisis were free from every symptom of disease and might be pronounced cured. Even patients with large cavities were benefited for a time.

But it is not in lupus, nor even bone- or gland-tuberculosis, that professional and public interest centres. A new and efficient treatment of these manifestations is, indeed, desirable, but what we all desire to know is, will the proposed method cure or even delay indefinitely the progress of consumption of the lungs? To this question there can obviously be but one answer at the present time, viz., we do not know. Temporary improvement is not unknown under the older methods, especially out-door life and a well-adapted climate. Nay, we may go much farther and assert that practical cures not infrequently result from hygienic modes of life in a favorable climate. Koch's method has yet to stand the test of time. Will the improvement endure, or is it but temporary? Will relapses soon occur, or will they be long postponed? Necessarily several years must yet elapse before these queries can be satisfactorily solved. Again, what is to become of a large mass of lung-tissue suddenly cut off from any form of vital nutrition and rendered dead? Will it gradually and harmlessly be removed by expectoration, or will it possibly undergo putrefactive changes and give rise to septicæmia? Of course, the new method is not incompatible with the indirect means, hitherto the only ones at our command, by which we sought to maintain nutrition and render the pulmonary tissue more resistant to the bacilli.

We hope that no great time shall elapse before this fluid is prepared in larger quantities and placed in the hands of the profession at large. It may be marked to an extreme degree by the instability of organic compounds, but we can imagine no reason why its production should be limited to a particular laboratory in the city of Berlin. The details of its preparation concern those skilled in physiological chemistry; but if Koch's discovery is to become the boon to humanity, which we hope, it must find its way as freely into the hand of the general practitioner the world over as does vaccine lymph. The quality of the fluid being guaranteed, no peculiar skill is required to dilute it suitably and throw it under the skin of the back, and every practical physician should be able to watch its effects and combat its dangers.

The remarkable local and general effects rapidly produced by this fluid are ample demonstration of its power. The fact that, injected into the system at a certain point, it seeks out tubercular lesions at distant points and destroys their connection with sound tissue, stamps it as an entirely new mode of medication. One thing is manifestly impossible for Koch's method or any other treatment to effect, and that is the restoration of lost tissue. Therefore, when large cavities exist, when the blood has become impoverished and the muscular system wasted, it is injudicious to make use of this method. No lasting good can then be secured, and, in all probability, death will be hastened. The method promises to be a valuable aid to the differential diagnosis between tuberculosis and carcinoma of the larynx. It must be anticipated, however, that in this case the swelling resulting from the injection may sometimes compel a resort to tracheotomy or intubation.

# CORRESPONDENCE.

## *A TREATMENT FOR BURNS.*

*To the Editor of the Medical Bulletin:—*

SIR: Long ago I made a mixture of 1 part of chloral and camphor mixt. and 1 part of oil of peppermint. For obvious reasons the chloral might be objectionable in deep wounds, but in any burns, however severe and extensive, oil of peppermint is the best application, relieving pain, and consequently shock, to a great extent. When the skin or deep tissues are burnt, apply, after thorough soaking with oil of peppermint, fluid extract of Pinus Canadensis, which will keep out air and promote healing.

WILLIAM STADLER, M.D.

LEXINGTON, TEXAS.

# MEDICAL NEWS AND MISCELLANY.

DR. JOSEPH H. COOVER, a prominent physician of Harrisburg, died recently.

DR. J. HOWARD BECK has located at 1925 Fairmount Avenue, Philadelphia.

THE AMERICAN ACADEMY OF MEDICINE met in Philadelphia, December 3d and 4th.

DR. J. ABBOTT CANTRELL has removed to 261 South Fifteenth Street, Philadelphia.

THE failure of a big patent-medicine firm in Pittsburgh should be regarded only as a healthy sign.

THE NORTH TEXAS MEDICAL ASSOCIATION.—The annual meeting of this Society convened at Sherman, December 9, 10, and 11.

BROCA, the French anthropologist, declares that the broad-headed race now represented by the people of Central France are the true Gauls or Celts of Cæsar.

THE UNIVERSITY OF BASEL, the only university in Switzerland that has excluded women students, has just decided to admit them to the medical department.

DR. GRACE DAVENPORT, one of the few women physicians of Texas, was recently appointed first assistant of the insane asylum at Terrell, in that State.

DR. WILLIAM S. FOSTER, of Pittsburgh, was in Philadelphia last month, visiting his son and nephew, who are attending lectures at the Medico-Chirurgical College.

PHILADELPHIA ELECTRO-THERAPEUTIC SOCIETY.—Dr. I. P. Willits recently read, at a meeting of the society, a paper on "Electrical Treatment of Infantile Paralysis."

DR. E. L. MACOMB BRISTOL, an old Philadelphia student, who spends much of his time in Europe, is located during the working months of the year at 1193 Broadway, New York.

THE MUTUAL AID ASSOCIATION of the Philadelphia County Medical Association entertained Dr. G. M. Smith and Dr. Henry Tuck, of New York, last month, by a reception and collation.

WOMEN PHYSICIANS.—At a regular meeting of the State Board of Health, held in Harrisburg, Secretary Lee made a register of all the practicing physicians in Pennsylvania. There are more than 8000, 300 of whom are females.

DR. C. A. LOOSE, of Peabody, Kansas, was in Philadelphia last month, seeing old friends and taking a look at his Alma Mater. The doctor is actively and successfully engaged in practice in a very prosperous section of the country.

*Bowser*—"Pillers is an eterprising doctor, isn't he?"

*Waggle*—"Yes, indeed! Why, he has a motto hung up in his office, 'Patients are a virtue.'"—*Harper's Bazaar.*

A THOUGHTFUL CUSTOMER.—*Druggist* (awakened at 2 A.M.): "What do you wish?" *Voice* (at the door): "If you'll let me look in your directory to see how to address this letter I'll buy the postage-stamp of you."—*Good News.*

BERLIN, with its 1,500,000 inhabitants, has 1398 physicians, 107 dentists, and 120 licensed apothecaries. For every 10,000 persons there are, therefore, 932 physicians and four-fifths of an apothecary. There are 34 hospitals, with 4635 beds, in the city.

DR. JOHN W. CROSKEY entertained Dr. Henry I. Dorr, Dr. Frank Woodbury, Dr. E. S. Gans, and many other physicians and their ladies, at an informal reception at his residence, 3325 Powelton Avenue, December 16th, in honor of an anniversary of his wedding.

DR. W. L. SCHENCK, the much-esteemed editor of the Kansas Medical Journal, the friend to many of the struggling young men in the medical profession, and one of the best and most zealous members of the American Medical Association, has removed to Topeka, Kansas.

EXAMINATION OF FOOD.—On the initiative of the Governor-General of Moscow, a laboratory for the examination of food, etc., is about to be established at the cost of the city. The laboratory will be under the direction of the Professor of Hygiene, in the University of Moscow.

A WELL-DESERVED HONOR.—Dr. A. P. Brubaker, one of the most thorough workers upon physiology and experimental therapeutics, an able teacher, and a practitioner of unusual

ability, has been selected by the trustees to fill the vacancy in the chair of Therapeutics in Jefferson Medical College.

If you have to get up and give your seat in the street-car to a lady, don't stand there and hang to the strap. The straps are all afflicted with bacteria, and are the nests of millions of microbes, and you are apt to get some of them up your sleeve. Just go right out and drop off the car and save your life.

"School-Life in Relation to Growth and Health" is the title of a paper by Prof. Axel Key, of Stockholm, published in the November Popular Science Monthly. Professor Key maintains that the studies of children, as now ordered, do not allow enough time for rest and growth, and urges a reform in this respect.

Committee to Examine the Action of the Lymph.—The Dauphin County Medical Society, of Harrisburgh, Pa., have appointed Dr. E. H. Coover, Dr. Hugh Hamilton, and Dr. Thomas J. Dermott a committee to visit Philadelphia at the proper time, and inspect the method of employing Koch's lymph in the hospitals of this city.

Poor Statistics.—The late International Congress was said to be attended by 8831 persons, but about 1500 were ladies and non-medical persons. It is said that the records were badly kept, and the secretary-general reported many more than were present. Doctors, students, women, and business men were all counted.

Dr. Samuel O. L. Potter, of San Francisco, was in Philadelphia last month, looking after his canvass for the chair of Therapeutics at Jefferson Medical College. The doctor is now in Europe, pursuing some of his special work, and any of his American friends can communicate with him by addressing Dr. Potter, 42 Grand Road, South Sea, England.

Royal Infirmary of Edinburgh.—Dr. R. W. Philip, Lecturer on Practice of Physic, Edinburgh School of Medicine, was elected some weeks ago as assistant physician of the Royal Infirmary in that city. Dr. Philip, who has been an earnest worker in medicine, and has received several prizes for his original research, deserved this honor conferred upon him by the managers of this well-known institution.

The Ambroise Pare Club.—Some Philadelphia physicians have formed a club, and given it the name of the French surgeon of the past. Dr. L. Flick was elected president, and Dr. P. J. Martin secretary. Dr. J. Healy, Dr. Prendergast, Dr. C. J. Hoban, Dr. L. F. Flick, Dr. M. O'Hara, Dr. Martin, Dr. T. S. Crowley, Dr. J. H. Wallis, and Dr. Strittmatter were elected as the board of directors. The club will hold quarterly meetings.

Investigating the Lymph.—Professor H. Ernest Laplace, of the Medico-Chirurgical College of Philadelphia, is in Berlin, investigating the lymph, under the special instruction of Dr. Koch. From word received through Dr. Donnell Hughes, of West Philadelphia, we learn that Dr. Laplace has received especial courtesy from the distinguished worker in Berlin, and that Dr. Koch had requested the doctor to remain some time in his laboratory.

Off for European Medical Centres.—Dr. Wahab McMurray, of Sydney, Australia, who has been pursuing a course of study at the Medico-Chirurgical Hospital of Philadelphia, sailed on December 18th for Queenstown. The doctor proposes to spend a year in visiting Dublin, Belfast, Glasgow, Edinburgh, London, Paris, Berlin, Vienna, and other medical centres, to continue his study of skin and venereal diseases from the clinical service of many of the prominent dermatologists.

Kensington Hospital for Women.—The managers of the Kensington Hospital for Women, at 124 Diamond Street, Philadelphia, had their donation day, December 17th, and received help in the shape of money, groceries, provisions, and house-furnishing goods. The demands made upon the managers by the needs of the larger hospital building, which it is expected to have ready for occupancy early in the coming year, justify them in making an urgent appeal for benevolent co-operation.

New Jersey Medical Board.—The State Board of Medical Examiners for New Jersey have organized with the following officers: President, William L. Newell; Secretary, William Perry Watson; Treasurer, A. H. Worthington.

The board will hold meetings for examinations at Trenton, on the second Thursday of January, April, July, and October. Examinations will be made in the following subjects: 1, Materia Medica and Therapeutics; 2, Obstetrics and Gynæcology; 3, Practice of Medicine; 4, Surgery (and Surgical Anatomy); 5, Anatomy; 6, Physiology; 7, Chemistry; 8, Histology, Pathology, and Diseases of the Eye and Ear. 9, Hygiene and Medical Jurisprudence.

Professor Whitla.—Dr. William Whitla, who has been appointed to the Chair of Materia Medica in Queen's College, Belfast, in succession to Dr. Seaton Reid, retired, is one of the most active workers in Great Britain upon his department. He is the author of an admirable text-book upon Materia Medica, which is used very largely both in this country and in Europe. For some years Dr. Whitla, who is also a practitioner of much distinction in Belfast, has been engaged in teaching and writing upon his favorite subject, and the wise selection, by those in authority, of

this distinguished physician, will give additional influence to the Queen's College. We have referred in this number to the very practical address given by Dr. Whitla at the opening of the school, which further demonstrated the proper selection of this gentleman to fill the Chair of Materia Medica.

CAMDEN COUNTY MEDICAL SOCIETY.—Across the Delaware River, in our very thrifty sister-city, the members of the medical profession are united in a strong and most useful medical organization known as the Camden County Medical Society. Gross, Taylor, Godfrey, Sherk, Ireland, Benjamin, Townsend, Robinson, Stevenson, Strock, McAllister, Wills, Palm, Hurff, Stevenson, Davis, and many other good practitioners, are members of this very active society. Twice a year the association has long, interesting, and most instructive meetings. Almost every man is in his place, especially when the banquet is announced, at these semi-annual gatherings, and good fellowship and interesting discussions always reward those who may attend as guests. Recently, the second annual meeting convened in Camden, and a very large number of choice papers and addresses were given by those who were present.

A FUNNY HEALTH OFFICER.—The Michigan State Board of Health recently took Health Officer Davis, of Close Village, to task for failing to send in his weekly reports. His reply was unique. He says: "There has not been enough sickness here in the last two or three years to do much good. The physicians find time to go to Milwaukee on excursions, serve as jurors in justice courts, sit around on dry-goods boxes, and beg tobacco, chew gum, and swap lies. A few sporadic cases of measles have existed, but they were treated mostly by old women, and no deaths occurred. There was an undertaker in the village, but he is now in the State prison. It is hoped and expected that when green truck gets around, melons plenty, and cucumbers in abundance, that something may revive business. If it does I will let you know."—*Medical Record.*

A STATE MEDICAL JOURNAL.—During August the Medical Society of Arkansas, organized October 13, 1875, published, through their trustees, Dr. P. O. Hooper, Dr. James H. Southall, Dr. James Dibrell (Jr.), Dr. Zaphney Orto, and Dr. William Lawrence, the first number of their monthly journal. The trustees have a most able member at their head, Dr. P. O. Hooper, who has already had much experience in placing the Journal of the American Medical Association in its present successful condition. Dr. Lorenzo P. Gibson has been elected by the trustees as editor, and he has demonstrated his ability as a journalist in arranging and giving the reader, in this first issue, most excellent editorial matter. We add our hearty congratulations, and hope other State medical societies will follow the good example of the Arkansas, and produce journals in which all the original papers offered at the meetings can be rapidly published.

THE EMPLOYMENT OF THE COLD BATH IN THE TREATMENT OF PNEUMONIA.—It has for a long time been considered that the effect of the cold bath was the direct abstraction of caloric. This certainly is one of the most important and the most readily apprehended, but it is not the only effect. Its action is first upon the circulatory system. During the immersion the vessels of the surface contract, the blood flows toward the viscera; its tension is augmented, and with it the work of the heart. After the bath an energetic reaction takes place; the blood flows back to the superficial vessels and leaves the visceral cavities. The nervous system is energetically stimulated; the brain becomes active, delirium ceases, the pulse increases in form, and respiration becomes more regular. Secretion is promoted, saliva and perspiration become abundant, but it is more especially upon the urine that the cold bath exerts any influence; even albumen, if it had existed, disappears. The action of the cold bath is not merely antithermic, but is actively therapeutic.—M. BARTH, in *L'Union Médicale; Prov. Med. Journ.*

MATERIALS OF THE MICROBE-RAISER.—Some of the means and methods of the micrologist, in his researches, must be mentioned. His outfit is extensive and novel. It includes the best known microscopes, and a well-constructed incubator with heater and thermometer, numerous test-glasses, beakers, filters, acids, alkalies, deep-colored dyes, and a good supply of prepared cotton.

In studying the life history of his microbes he will require a well-supplied commissariat. He must be a professional caterer and a bountiful feeder. He must have fluids, semi-fluids, and solids; broths of various meats, peptonized food, the serum of blood, *à la Koch*, and Pasteur's favorite recipe with the French refinement: Recipe, 100 parts distilled water, 10 parts pure cane-sugar, 1 part tartrate of ammonium, and the ash of 1 part of yeast. Among the substantials must be found boiled white of egg, starch, gelatin, Japan isinglass, and potato—the last from South as well as North America.—From "*Invisible Assailants of Health*," by SAMUEL HART, M.D., in *The Popular Science Monthly.*

SLEEP FOR SCHOOL-CHILDREN.—We all know how much greater is the need of children for sleep than of grown persons, and how necessary for their good it is to be able fully to satisfy this need; but how great it is generally at any par-

ticular age of the child is very hard to define exactly. The amount varies under different climatic conditions. In Sweden, we consider a sleep of eleven or twelve hours necessary for the younger school-children, and of at least eight or nine hours for the older ones. Yet the investigations have shown that this requirement lacks much of being met in all the classes, through the whole school. Boys in the higher classes get but little more than seven hours in bed; and, as that is the average, it is easy to perceive that many of them must content themselves with still less sleep. It is also evident from the investigations that the sleeping time is diminished with the increase of the working hours from class to class, so that pupils of the same age enjoy less according as they are higher in their classes. It thus appears constantly that in schools of relatively longer hours of work the sleeping time of the pupils is correspondingly shorter. In short, the prolongation of the working hours takes place for the most part at the cost of the time for sleep.—From "*School Life in Relation to Growth and Health*," by PROF. ALEX. KEY, in *The Popular Science Monthly for November*.

AN EFFECTIVE CURE.—"Do you believe in cures effected by the laying on of hands?"

"I certainly do. There is nothing like spanking to make a child behave himself."—*Munsey's Weekly*.

CREMATION BETTER THAN CORRUPTION.—There are many things to commend cremation, aside from the pretty Indian fancy that fire, the purifier, completes the deliverance of the soul from its long time prison of flesh, and by the smoke and ascending heat forms a path on which the spirit ascends to its home in the skies, or, as one tribe has it, the soft, warm chariot conveys the released and purified soul toward the sun. We, of course, scoff at this, but there are potent arguments that should influence even our profound wisdom—sanitary reasons, the health of the living; economical reasons, the much-reduced expense; even sentimental reasons, the possibility of preserving the remains from desecrating touch. Most powerful of all in its favor is the prevention of premature burial. All these are on the side of cremation, and against it is but one—sentiment. It seems more beautiful to lay our friends to rest, softly pillowed, shrouded in satin, inclosed in rose-wood, covered with flowers, and of anything beyond we refuse to think. We erect the imposing marble, set out the blossoming plant, and carry flowers to the spot. The cemetery appeals more strongly to the sentiment than does the crematory. I find no fault with sentiment, but I say it will more appropriately cling around an urn containing the pure ashes of what was once a loved form than about the unmentionable and unimaginable horrors covered by our flowers.—From "*The Earthly Tabernacle*," by OLIVER THORNE MILLER, in *The Popular Science Monthly*.

CHEMISTRY IN ANCIENT EGYPT.—The priests of Thebes and Memphis made great advances in the knowledge of the art of extracting metals, of forming alloys, and of making vessels and tools out of them. They distinguished crude gold from refined gold, and could work that metal up into a variety of articles. They fed the hope that they might be able to obtain it by coloring *asemon*, or silver, yellow. Of the latter metal they made money, the value of which was guaranteed by an impressed image. They extracted gold and silver from *electrum*, a mineral containing both substances, but which presented to their eyes the appearance of a metal like them. This was what led them to the notion of transmutation.

The Egyptians designated as *chesbet* several kinds of blue or green sapphires colored with cobalt or copper. They made incrustations, amulets, necklaces, and various ornaments of them. They succeeded in compounding an artificial chesbet, resembling the natural stone. A fact worthy of remark in the matter is, that this was done by "the assimilation of a colored substance, a precious stone, an enamel, a vitrified color, with metals." This assimilation suggested the new idea of dyeing; "for the imitation of the sapphire rests on the coloring of a large mass, colorless by itself, but constituting the vitrifiable basis, which we dye by the aid of a small quantity of coloring matter. With enamels and colored glasses thus prepared, the natural precious stones were reproduced; they were covered with figures, with objects of earth or stone, and were incrusted with metallic objects.—From "*The Evolution of Chemical Truth*," by M. LOUIS OLIVIER, in *The Popular Science Monthly*.

THE DOCTOR GOT HIS PAY.—All know how disciples of Izaak Walton who frequent the same fish-pond feel toward a finny old reprobate wary enough to defy them for a whole season. Several Buffalo doctors felt the same way about an aged Italian who was always requiring a physician's services, but who never could be induced to pay. A brand-new doctor took the patient in charge not long since, although warned that it would be a service of love.

"O, I'll get the money all right," said the young man, confidently. And, sure enough, a few days ago he announced, with no little pride, that he had got the money.

"How in thunder did you do it?" he was asked by a doctor who was less successful.

"Well, you see," was the reply, "I've just sold his skull for $3."

And the best part of the story is that it sticks closer than a brother to the truth.—*Buffalo Express*.

TARPON SPRINGS.

BY F. A. DAVIS, ESQ.

SWEETLY beneath the southern skies
Fair Tarpon, ever smiling, lies,
And calmly in the golden haze
Each wooded slope and orchard lays.
The summer breezes gently play
O'er Sylvan Point and Crystal Bay;
The summer sunlight ever shines
O'er waving groves of scented pines;
While stretching inland from the shore,
Where ne'er is heard the billow's roar,
Land-locked bay and smooth bayou
Boatman and hunter gently woo.

The orange groves of vivid green,
Whose yellow fruit shines bright between,
And grape-fruit clusters hanging there,
With luscious shaddocks, sweet and fair—
These meet the eye in pictures sweet,
With fallen lemons at our feet.
The guava holds its tempting load
And grateful shades o'erhang the road.
Far out beyond Clearwater Bay
See that bright field of water lay!
See, how it sparkles in the sun,
As lights and shadows swiftly run,
Out from the east and to the west,
O'er its ever-moving breast.

Far westward o'er that watery plain
Lies the distant Mexican main,
And southward lie the tropic seas,
Where sultry summer kills the breeze;
But coming to this favored coast
Each unwished trait, ere here, is lost,
And only blessings to it flow
From tropic seas or lands of snow.
Under these bright and balmy skies
Fair pleasure lives and never dies;
Here Hygea holds her gentle sway
And restful night succeeds each day.

Disease and pain are banished here;
Unknown, unfeared are grief and care—
Here, underneath the whispering pines;
Here, 'mid the palmetto and vines,
Under the sweetly smiling skies,
Drifting and dreaming in paradise;
Out on the fair and smooth bayou,
Where wind and sunshine sweetly woo;
Far out upon the tossing bay,
Where silver tarpon leaping play;
Out on the breezy gulfward isle,
Where winds and waters ever pile,
Borne inward on their greenish swell,
Tangled weed and beauteous shell;
Out on the pier toward the bay,
Where the Spanish mackerel play,
Where watchful eye and skillful hand,
The wary quarry bring to land.

Ah! sweet Tarpon, upon thy shores
Nature her choicest treasure pours!
Wide o'er the world shall spread thy fame,
And grateful thousands bless thy name;
From every clime shall seek thy strand
And rear their homes on every hand.
A western Naples thou shalt grow,
And all the earth thy glory know.

[The editor, who had the pleasure of visiting the fertile and beautiful West Coast of Florida one year ago, recognizes the vivid but true picture drawn by the author in these expressive lines. The natural and health-giving properties of this resort are so well described that the editor feels it will be of some service to the many readers of the BULLETIN, who, like all progressive physicians, study climate and its advantages to the sick.—EDITOR.]

MUSCULAR STRAIN.—A surgeon states that of 5000 decrepit or aged soldiers that have been brought under his notice, fully 80 per cent. were suffering from heart disease in one form or another, due to the forced physical exertion of the campaign; and he predicts that as large a percentage of the athletes of to-day will be found, twenty-five years from now, to be the victims of heart disease, engendered by the muscular strains that they force themselves to undergo. With regard to the effect of exercise on the prolongation of life, it may be said that there are more people living in France to-day who have passed the age of 60 than there are in England, the home of athletic sports, and there is probably no nation in Europe more averse to muscular cultivation for its own sake than the French. Great athletes die young; and a mortality list of Oxford men who had rowed in the 'Varsity races, published a few years ago, showed that a comparatively small percentage of them lived out the allotted time.—*Exchange.*

A PERMANENT CURE.—*Jaggs*—"Since Jones used Dr. Killorcure's elixir of life he has not been troubled with rheumatism."

*Baggs*—"Do you think it's a permanent cure?"

*Jaggs*—"Oh, yes; he's dead."

FORTY YEARS DROWNED.—A very interesting report has just been issued by Dr. Konig, judicial physician of Hermannstadt, on the state in which the human subject, after forty years' immersion in water, may be found by the physiologist. In the revolutionary upheaval of 1849, a company of Honveds, as the Hungarian militia are called, having fallen in the vicissitudes of war, were consigned to the waters of the Echoschacht, a pool of considerable depth not far from Hermannstadt. After some forty-one years their bodies have been brought up again to the light of day, and subjected to a careful and minute investigation from the physiologist's point of view. Dr. Konig found them in perfect preservation, both externally and internally, without a single trace of any decomposing process. Externally, they had the appearance of having been kept in spirit, like so many preparations in an anatomical museum. Structurally, the organs retained their outline perfectly, and were so easily recognizable in tissue as well as in configuration that, according to Dr. Konig, they might have been exhibited for "demonstration" in an anatomical lecture-room. Considering that the bodies had been forty-one years under water, this is, indeed, a remarkable phenomenon.—*New York Ledger.*

ADDRESS OF A DISTINGUISHED TEACHER.—The British Medical Journal speaks thus of the address of Dr. Whitla at the opening of the Queen's College, Belfast:—

"The new professor was introduced by Dr.

Hamilton, the President of the College, who adverted to Dr. Whitla's distinguished career as a student and a practitioner, and to the great success which had attended his work upon 'Materia Medica.' He expressed his pleasure that the two professional chairs which had become vacant during his presidency had both fallen to alumni of the Queen's College, and that these appointments were universally admitted to have been the best that could have been made. Dr. Whitla, who was very cordially received, then delivered his address, in which, after referring in laudatory terms to his predecessor, he proceeded to sketch the nature and scope of the subjects included in the work of his chair. He dealt, successively, with materia medica proper, pharmacy, pharmacology, and therapeutics. The experiments of Majendie with regard to strychnine and Brunton's discovery of the efficacy of nitrite of amyl in angina pectoris were described at length in illustration of the modern development of pharmacology. He pointed out how all the other departments of medical study were preparatory to therapeutics, which would be the real life-work of most of his hearers. The concluding portion of the address was an earnest exhortation to the students to put before them the ambition of adding some new facts to knowledge and advancing the art of medicine. They were reminded that soon most of the subjects in their curriculum would be closed to them, but that at the bedside they would be constantly engaged in studying the effects of remedies upon disease, and that it might be in their power to make some real advance in the development of their art."

THE LAST CONGRESS CONDEMNED.—Dr. Eugene Smith, of Detroit, in making his report upon the Congress held in Berlin last summer, said that the accomodations for the meeting were very poor. Having prepared for 4000 or 5000 guests, they were obliged to provide entertainment for about 7000. Many of the section-rooms were directly under a district railroad, where trains were continually coming and going. Moreover, often the section-rooms were connected by large, open arches, allowing the hum of one room to assist in drowning the voice of a speaker in another. In section-work, as far as he could observe, there was a general discrimination in favor of the Germans. There were printed programmes of work to be done, and often Germans down on the list were crowded to the front. If a foreigner had a German name, he was well received. As illustration, he mentioned the case of a German in London, of no special reputation, having been made president of the laryngological section, when it might have been expected that if an Englishman was to have been chosen it would have been one of the prominent gentlemen in that specialty. Many excellent papers were read, but it was next to impossible to hear what was said or take part in the discussion on account of the noise and disorder. As to the results obtained by the Germans in their operative work, we should be a little discriminative. Martin is doing an enormous amount of operating. A friend of the speaker was present at a hysterectomy made by Martin. As the uterus was placed on the plate after removal, its entire body appeared absolutely normal. The doctor convinced himself that there was no epithelioma of the uterus for which it was removed, but when touching the specimen was sharply upbraided by Dr. Martin for destroying his specimen. This same morning he did five laparotomies. The fees in Germany are generally extremely small. As illustration, he mentioned a case of a lady taken by her physician in Washington to Hinchberg, who carefully examined her and then disgusted both American doctor and patient by charging her *five dollars*.

Dr. Carstens indorsed all that Dr. Smith had said in regard to accommodation. He was himself personally well treated, but collectively the foreign physicians were not well entertained or respected by the Germans. They think the Americans not only superficial in medicine, but in every other branch; they are looked down upon as inferior. He believed that our system of schools was superior to the foreign system. The German schools are theoretical and not practical, while the American schools are eminently practical. Probably it is for this reason that many of the German operators surround themselves with American students and assistants. The doctor spoke of the large reception, where many Americans learned that ladies are not expected to be present on such occasions. Many members of the Congress took their wives to the reception, as would be done in this country, but at the door the ladies were turned back. One thing was done in Berlin that seemed to the doctor as very much out of place on such an occasion, and deserved severe adverse criticism, and that was, the odious distinction shown by the royal reception given, to which about 400 of the entire number of 7000 were invited. At a large general meeting it was out of place to select a few on whom to bestow the honors of royal favor.

[Had the many journalists, few of whom attended the meeting just referred to, been n Berlin, they, too, would have coincided with the honest and candid opinions given by the most worthy and excellent practitioner from Detroit. On a large ocean steamer, containing many returning Americans from Berlin, the concensus of opinion fully indorsed that already given. The Congress was large in number, but the arrangements were very inadequate. Women and non-medical men were all counted by the captious and pretended aristocratic Secretary-General in order to surpass other gatherings in size —EDITOR.]

# BOOK REVIEWS.

*A Text-Book of Comparative Physiology for Students and Practitioners of Comparative (Veterinary) Medicine.* By WESLEY MILLS, A.M., M.D., D.V.S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal, with 476 illustrations. New York: D. Appleton & Co., 1890. Small 8vo, pp. 636.

A handsomely printed, profusely illustrated, well-written compend of comparative physiology, containing all the essentials of human physiology relieved of the wearisome minutiæ of technical detail that make the study of physiology with ordinary text-books so unattractive, and presenting many illustrative lessons from animal physiology that are both important and interesting. Such a text-book would be valuable to the students, during the first year at least, in all our medical schools, because of the light which comparative physiology throws upon human physiology, and also because the information it conveys should be a part of the general information of every physician. The author is a good physiologist, and has given in this work an admirable compendium highly valuable to the veterinarian, but scarcely less so to the physician. The arrangement of matter is good, a large portion at the beginning being devoted to the subject of reproduction and the development of the embryo. Every part is well illustrated with carefully selected and artistic cuts.

*Saunders' Question Compends, Nos. 8 and 9* (double number). Essentials of Practice of Medicine, arranged in the form of Questions and Answers, prepared especially for Students of Medicine. By HENRY MORRIS, M.D., late Demonstrator Jefferson College, Philadelphia, etc., with a very complete Appendix on the Examination of Urine by LAWRENCE WOLFF, M.D., Demonstrator of Chemistry, Jefferson Medical College. Philadelphia: W. B. Saunders. 12mo, cloth, pp. 368 and 63. Price, $2.

The didactic method of instruction must be supplemented by questions and answers in order to make the teaching effective; moreover, it is the primitive educational method, and, therefore, the easiest for beginners, especially to those whose minds have not been trained to the acquisition of technical knowledge. As the book is principally intended for such, the author, perhaps wisely, has omitted many recent facts in regard to the rôle of bacteria in disease; but their relations to zymotic disease, such as small pox, scarlatina, typhoid fever, or cholera, have been so well established by the labors of Chauveau, Pasteur, Eklund, Eberth, Koch, and many others, that it is not sufficient to simply state that these are due to a special poison. The physical and chemical characters should be stated where they have been generally acknowledged. With this exception, students will find the work a valuable aid in their comprehension of pathology and therapeutics. The work of Dr. Wolff forms an admirable summary of the chief points in uninology and analysis.

*Saunders' Question Compends, Nos. 12 and 15.* Essentials of Minor Surgery and Bandaging, with an Appendix on Venereal Diseases, arranged in the form of Questions and Answers, prepared especially for Students of Medicine. By EDWARD MARTIN, A M., M.D., Instructor in Operative Surgery, University of Pennsylvania. Illustrated. Philadelphia: W. B. Saunders, 1890. Pp. 166.

A very good compend of minor surgery, including bandaging and venereal diseases. The appendix would be found especially valuable to many practitioners, as the advice regarding the treatment of gonorrhœa, urethritis, chancroid, and syphilis is explicit and reliable, and is worth the price of the book.

*Essentials of the Diseases of Children.* By WILLIAM M. POWELL, M.D., Physician to Clinic for the Diseases of Children in the hospital of the University of Pennsylvania, etc.

It must be a great relief to the poor overworked student to turn from the labored and laborious treatises on pædiatrics, loaded down with the lumber of centuries, and take up a little volume that gives the desired information in its most condensed form like the one before us. Of course it is open to criticism for many of its statements, but, after all, the student is after positive teaching, and wants to learn the rule first, leaving the exceptions to be learned later. The prescriptions are numerous, and the advice can be safely followed. It is proper to say that we do not think that the distinction is made as clear as it should be between enterocolitis and cholera infantum, the latter being simply cholera morbus in infancy, and probably occasioned by infection just as it is in adults.

*Post-mortems; What to Look for and How to Make Them.* By A. H. NEWTH, London. Edited with numerous notes and additions by F. W. OWEN, M.D., formerly Demonstrator of Anatomy, Detroit College of Medicine. Cloth, 12mo; post-paid, $1. The Illustrated Medical Journal Company, Publishers, Detroit, Mich.

A small book of convenient size to be carried in the inside coat-pocket, containing in concise

form, arranged for easy reference, the instructions for systematic conduct of post-mortem examination. It also has a number of tables of pathological data that are valuable for reference during an autopsy. To the country physician, who makes autopsies infrequently, it is especially valuable; also to the medical student who is occasionally in the "dead-house" of the hospital. The American editor has added numerous important notes to the text of the English author. Besides the ordinary conditions met with after death, there are chapters devoted to the post-mortem appearances seen in those poisoned, drowned, hanged, or cases of infanticide. It will thus be of great use in these classes of "suspected deaths."

*Index Catalogue of the Library of the Surgeon-General's Office, United States Army.* Authors and Subjects. Volume XI., Prædronus—Régent. Edited by JOHN S. BILLINGS, Surgeon United States Army. Washington: Government Printing Office.

This large volume includes 9539 authorities, representing 4535 volumes and 8908 pamphlets. According to the report to Surgeon-General Moore, it likewise includes 14,262 subject-titles of separate books and pamphlets and 38,080 titles of articles in periodicals. It forms, with the previous volumes issued, a work that, if added to public and private libraries, can be consulted by teachers and writers often with great advantage. The work upon this volume shows careful editing, the text being clear and the various titles and subjects being well arranged.

*Cyclopædia of the Diseases of Children, Medical and Surgical.* Volume IV. Edited by JOHN M. KEATING, M.D. Royal octavo; 1053 pages. J. B. Lippincott & Company, Publishers, Philadelphia, 1890.

Volume IV of this extensive work is, even by reason of the subject-matter contained in it, more interesting than those we have previously referred to. The book is divided into four parts—the first being upon the ear, the second the eye, the third hygiene, and the fourth diseases of the nervous system. Dr. Charles H. Burnett, having much clinical experience, has given a most thorough description in Part I to diseases of the ear in children, and, in addition to the recommendation of good drugs for treating ear diseases, the author justly dwells upon hygiene of the ear. The eye receives attention from Dr. George E. de Schweinitz, Dr. Charles Oliver, Dr. Charles Turnbull, and Dr. George Gould, with some very good illustrations of diseases of this important organ, and the use of operative measures. One of the very best portions of the volume is to be found in Part III, devoted to hygiene,—physical development, in children,—which is a subject pregnant with interest to every practitioner in every department of medicine, is treated of remarkably well by Dr. J. M. Keating, the editor, and Dr. J. K. Young. After the authors have considered most thoroughly the various forms of exercise and food, they give equally as well an account of gymnastics, illustrating the different movements by diagrams and excellent advice in the text. In Part IV, in diseases of the nervous system, which concludes this unusually excellent volume, the editor has introduced as writers such eminent members of the profession as Drs. Allan McLane Hamilton, Francis T. Miles, Landon Carter Gray, Dr. William B. Pritchard, B. Sachs, M. Allen Starr, Abner Post, J. J. Putnam, Wharton Sinkler, Charles L. Dana, P. S. Conner, E. C. Seguin, Morris J. Lewis, F. Y. Dercum, George W. Jacoby, Edward N. Brush, and many others. The continuation on idiocy and imbecility by the last-named writers is also one of much merit, the concluding portion of the article on the education of idiots being of much interest to all readers upon this subject. The writer continues to show how at this time all nations pay more or less attention to the care and training of these unfortunate beings. In some cases, he adds, of moral imbecility, life-detention will be necessary, and no less an authority than Dr. Kerlin, who resides with a most successful school in our midst, the writer continues, believes that the ordinary routine of education should be denied them, as by education they will simply attain greater expertness in crime. Such cases should be trained, says our author, to useful employment, and thus rendered, as far as possible, self-supporting. The editor, associate editors, and publishers have produced and given in this fourth volume an invaluable book on diseases of children.

*The Biography of Ephraim McDowell, M.D., "The Father of Ovariotomy."* By his granddaughter, MARY YOUNG RIDENBAUGH. Together with valuable scientific treatises and articles relating to ovariotomy, and eulogistic letters from eminent members of the medical profession in Europe and America. Small octavo, full Russia, gilt; pp. xvi–538. New York: Charles L. Webster & Company, 1890. Wm. J. Dornan, Philadelphia, printer.

Mrs. Ridenbaugh, who possesses the many good traits of her distinguished grandfather, has given to the profession, in the biography before us, a work of rare merit and of great value historically, as well as in the graphic account of the operations performed by Dr. Ephraim McDowell. This good authoress has had the tact and the love of the memory of her distinguished relative so much at heart as to dedicate this book to the medical profession. The physicians and surgeons all over this land who reverence and honor the

memory of the great surgeon, McDowell, should show their appreciation in turn by obtaining this interesting book. The book is not only interesting from the many beautiful accounts given by the authoress of this eminent worker in our ranks in the past, but instructive for the student and physician everywhere for the strong points in character that McDowell's life teaches, and the surgical knowledge that can be gleaned from its pages. The workers—the men of distinction in all parts of the world—have come forward, and have added by sketches and letters to the great value of this biography.

*A Treatise on Headache and Neuralgia.* Including Spinal Irritation Disquisition on Normal and Morbid Sleep. By J. LEONARD CORNING, M.A., M.D. With an appendix, Eye-Strain a Cause of Headache. By DAVID WEBSTER, M.D. Illustrated. Second edition. New York: E. B. Treat, 5 Cooper Union, 1890. Price, $2 75.

Dr. Corning, who is known as one of the best of modern writers upon nervous diseases, has again given the profession, in the second edition of this work, much new material upon headache and neuralgia. The author describes well all forms of headache and the varieties of neuralgia. The very best and most interesting portion of the work is upon the treatment; and we may here add that Dr. Corning has exhausted his subject in giving all the operative and medicinal methods of arresting especially neuralgia. We should not omit the excellent account that the author gives of the various drugs employed in eradicating neuralgia. Electricity, too, receives attention in a most judicious manner by the author, who has had the clinical experience to speak of its use. Dr. David Webster has increased the value of the book by giving in an appendix a masterly contribution upon eye-strain, a cause of headache.

*The Medical Student's Manual of Chemistry.* By R. A. WITTHAUS, A.M., M.D., Professor of Chemistry and Physics in the University of the City of New York; Professor of Chemistry and Toxicology in the University of Vermont, etc. Third edition. New York: William Wood & Co. Price, $3.75.

The previous editions of this very valuable chemistry were all received and much appreciated by the press as well as the students and practitioners in many sections of the United States. The present edition includes all the new developments upon chemistry, and there are very many of them, as will be seen by an examination of this work. For the many new and important additions to this work, of great interest to both physicians and students, we need only refer the reader to the sections upon phenols, terebenthic series, glucosides, and alkaloids. A careful examination of the sections first-named will repay any physician. They abound in many chemical facts of unusual interest. The entire work is practical and is one of the very best chemical text-books in existence.

*Bacteriological Technicologyy for Physicians.* With seventy-two figures in the text. By Dr. C. J. SALOMONSEN. Authorized translation from the second revised Danish edition, by WILLIAM TRELEASE. New York: William Wood & Co. Price, $1.25.

The author of this useful book gives the physician and veterinary surgeon a guide to practical work in the laboratory upon bacteriology. The fundamental experiments for the study of pathology and hygiene are related in such a clear manner as to serve the purpose of those who wish to pursue this important work in the laboratory. The book is well illustrated, the author giving simple, inexpensive, and easily-managed apparatus for conducting bacteriological investigations. The microscopic examination and staining of bacteria, described in Chapter XIII, is both interesting and instructive.

*Hand-Book of the Practice of Medicine.* By FREDERICK TAYLOR, M.D., F.R.C.P. Cloth, 8vo, pp. 877. Price, $4.00. Published by P. Blakiston, Son & Co., Philadelphia, Pa.

One of the most difficult tasks upon the part of an author upon practice of medicine is to furnish, in a compact form, a thorough account of all the modern additions to that important department. Many writers err in giving a volume too large, the extensive literature of the day being dragged in excessively until the work becomes ponderous, bulky, and not serving the practical purpose of the busy practitioner. We are pleased to observe in this manual a truly practical work upon medicine. The author has the happy faculty which few writers possess, of expressing himself very often in short sentences: a rule that would be wise and even practical for very many of the authors of our time to follow. All of the subjects receive the proper attention which each merits. As we are in the midst of winter, when diseases of the bronchi are most prevalent, a single reference to that part of the work will be especially pertinent. In the treatment of acute bronchitis, after reviewing the generally accepted course, Dr. Taylor advises, when the cough is very irritating, sedatives, as morphine, in small doses, or compound tincture of camphor or bromide of potassium or ammonium. But, he wisely adds, they must be used with great care if there is much lividity, as they may dangerously depress the respiratory and cardiac centres under these circumstances. Above advice is remarkably well given, and it should be especially heeded by many in treating this very

obstinate disease. Sedatives, Dr. Taylor further says, in speaking of capillary bronchitis, must be given with the greatest caution, or entirely avoided, for the reasons given. In referring to the treatment of chronic bronchitis the author recommends, among other good agents, turpentine, copaiba, and the more modern drug—terebene. This will, on examination, be found to abound in very many such practical observations, making the manual of great service to the physician.

*Progressive Exercises in Practical Chemistry.* By HENRY LEFFMAN, M.D., Ph.D., and WILLIAM BEAM, M.A. Illustrated. Philadelphia: P. Blakiston, Son & Co., 1890.

This small book contains—to the laboratory worker, the physician as well as the student—very practical exercises in chemistry. It is just the companion for every one who wishes to be instructed or to give instruction upon this branch. Dr. Leffmann has again shown, by this excellent original contribution to the profession, his ability and success as a writer and teacher upon chemistry. The appended experiments are given with such clearness and simplicity as to interest all who may examine the work.

*Quiz Compends, No. 1.* A Compend of Human Anatomy, including the Anatomy of the Viscera. By SAMUEL O. L. POTTER, Professor of Theory and Practice of Medicine in the Cooper Medical College, etc. Fifth edition. Revised and enlarged, with 117 Wood-Engravings; also, an Appendix, containing numerous tables and sixteen lithographic plates of the nerves and arteries. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut-Street, 1890.

Potter's "Quiz Compends" embraces in remarkably small space very much valuable material. The author, who has had much experience as a teacher, has always succeeded in adding to each issue much of valuable information to the student of anatomy. In this fifth issue the text has not only been increased, and thus rendered more interesting, but most striking and useful plates of nerves and arteries have been inserted.

*Physiognomy and Expression.* By PAOLO MANTEGAZZA, Senator; Director of the National Museum of Anthropology, Florence; President of the Italian Society of Anthropology. Two double numbers of The Humboldt Library; price, 30 cents each. The Humboldt Publishing Co., 28 Lafayette Place, New York.

Much interesting information is brought together in this book, which is divided into two parts. The first embraces a historical account of the many efforts which have been made to read character by the configuration and expression of the face. The second part, after a chapter on the alphabet of expression, contains a succession of chapters upon the expression of the passions, emotions, and thought. The author endeavors to extend the observations of Darwin upon the expression of the human face.

*The Latin Grammar of Pharmacy and Medicine.* By D. H. ROBINSON, Ph.D., with an introduction by L. E. SAYRE, Ph.G. Philadelphia: P. Blakiston, Son & Co., 1890.

Physicians, as well as pharmacists, very often forget all that has been learned in the past upon Latin, and especially upon grammar. The excellent volume before us is small in size, compact as to material, and is conveniently arranged; so, every one wishing to keep well posted in pharmacy and medicine can enjoy the Latin words and expressions in the proper way. The authors have presented a good book—one that will become of great value as a work of reference, especially in writing prescriptions.

*Intestinal Diseases of Children.* By A. JACOBI, M.D. Nos. 5 and 6, The Physicians' Leisure Library. Detroit: Geo. S. Davis.

The author in the first part or volume, after a consideration of infant feeding, the various substitutes that have been proposed for mothers' milk, writes of the affections of the alimentary canal. A description of the physiology of gastric digestion precedes an account of the disorders to which the stomach is liable. Acute and chronic gastric catarrh, and other less common organic diseases of the stomach, are briefly described.

The second volume opens with an account of intestinal digestion. A symptomatology of intestinal diseases is next given, after which the inflammatory disorders of the bowels, tuberculosis, worms, invagination, etc., are discussed.

*International Atlas of Rare Skin Diseases.* Editors: MALCOM MORRIS, London; P. G. UNNA, Hamburg; H. L. LILLE and L. A. DUHRING, Philadelphia. Hamburg and Leipzig: Leopold Voss; London: H. K. Senat, 136 Gower Street, W. C.; Paris: G. Masson, 120 Boulevard St.-Germain; Philadelphia: J. B. Lippincott Company. Section I and II. Price, $6 for each part.

This very large atlas, which has been placed upon the market at a great expense to the publishers, contains illustrations of rare skin diseases that seldom appear in many physicians' practice. The work demonstrates the rapid and successful strides of dermatology in every part of the world. It likewise shows the careful and thorough work of the editors, who have devoted their lives and means in developing this important specialty in medicine. In the first section Dr. Malcom Morris

gives a remarkably good illustration of lymphangioma circumscriptum, with text that can be understood by all readers. In this same section Dr. P. G. Unna has a graphic description of urethema acneforme, in which the author shows the histology well executed upon the plate. Semisclerotic lupus of the tongue forms the last subject given in this section by H. Leloir. This illustration is not only very fine, but the bacteriological research, in which the author is especially expert in, is exceedingly clear. Dr. Leloir, by his experience, shows that inoculation of portions of the growth produced tuberculosis. The query in that case would naturally arise, Was it not pure tuberculosis of the tongue?

In Section II the illustrations are also very good upon Sarcoma Pigmentosum Diffusum Multiplex, by Dr. Ernest Smirimer; Symmetrical Keratodermia of the Extremities, by Dr. Ernest Besnier; Angiokeratoma, by Dr. Nitario Mirebelli; Soft Chancre of the Breast, by Dr. A. Pospelow.

The work is of rare value, and, being given in each section in English, German, and French, can be of especial importance to members of the profession in every part of the world.

*Transactions of the Medical and Surgical Faculty of the State of Maryland.* Semi-Annual Session, held at Hagerstown, Md., November, 1889. Ninety-second Annual Session, held at Baltimore, Md., April, 1890. Dr. G. L. TANEYHILL, Paul and Saratoga Streets, Baltimore, Md., Recording Secretary.

This volume is a credit to the medical society by which it has been issued. It contains very many excellent papers, together with the minutes of the last meeting.

*Diagnosis and Operative Treatment of Gunshot Wounds of the Stomach and Intestines.* By N. SENN, M.D., Ph.D., of Milwaukee, Wis.

The views and experiments that have been given by Dr. Senn in a series of papers are collected together and placed in this small book. It will be found of great service as a book of reference, and will prove of value to those who may want to respect Dr. Senn's experiments.

*Memorial Sketches of Dr. Moses Gunn.* By his wife. With extracts from his Letters and Eulogistic Tributes. Chicago: W. T. Keener, 1889.

The late Dr. Gunn was one of the most noted surgeons of his day. He was a man of extensive experience, broad thoughts and views. He was most active in the medical societies, and the reader will learn from this work his many additions to his chosen department in medicine. Mrs. Gunn has certainly succeeded remarkably well as an authoress, in placing before the profession a work that reflects the greatest credit upon her. The book contains many thoughts and expressions that will repay its perusal even by those who did not know the distinguished surgeon. The publisher has not only given the reader a well bound, well printed, and arranged book, but one that has additional interest in the life-like portrait of Dr. Gunn, which will recall him kindly to the memory of his many friends in all parts of the country.

*The Practical Application of Electricity in Medicine and Surgery.* By R. W. ST. CLAIR, A.M., M.D. 8vo, pp. vi–222–viii. Philadelphia: R. H. Andrews, M.D. (Editor of the Medical Summary), 1890.

The author issues this book as a purely practical work,—a guide for those who have neither the time nor the inclination to wade through the cumbrous mass of extraneous material found in so many so-called "Text-Books," but which are unintelligible to those who are not up in the integral calculus, and *au fait* in algebra all through. He has done this thoroughly; the plan is plain, the diction clear, the facts correct. The range of subjects taken up as amenable to electric treatment is long, and in some instances those who are unfamiliar with what the current scientifically applied can do will be somewhat incredulous; they need but try, and see for themselves. He does not confine himself to one kind of battery, but gives a fair estimate of the value of many different makes; it is evident, however, that the "Dry Cell Chloride of Silver" element (Barrett's, of Baltimore, Md.) is the favorite, as it should certainly be. The advantages of static electricity in its place are well shown, and it is to be hoped that his readers may be influenced by what he says in this direction, for much foolish twaddle has been spent in decrying this form of energy, not only by those who talk for talk's sake in medical societies, but by others who in popular and scientific journals make statements at once misleading to inquirers and radically untrue in themselves. The book is a good one; it is elegantly gotten up by the publisher, and it will repay its owner even if he is up in the science of electricity. All points needing illustration are taken care of by fine electrotypes. The paper and binding are first-class, and the whole appearance is creditable alike to the author and the gentleman who issues it from his sanctum.

*Essentials of Practice of Pharmacy.* Arranged in the form of Questions and Answers. Prepared especially for pharmaceutical students. By LUCIUS E. SAYRE, Ph.G. 179 pp., 16mo, $1.00. Philadelphia: W. B. Saunders. 1890.

The entire domain of pharmacy is included in this small volume, in such a convenient

manner as to be of especial service, both to the pharmaceutical and the medical student. The author gives, in a very simple way, the metric system and the method of approximating the equivalents in other systems. Professor Sayre shows, by the selection of suitable questions and appropriate answers upon pharmacy, how competent he is to teach and write upon this department.

*Physical Diagnosis and Practical Urinalysis.* An Epitome of the Physical Signs of the Heart, Lungs, Kidney, and Spleen in Health and Disease. Edited by JOHN E. CLARK, M.D., Professor of General Chemistry and Physics in the Detroit College of Medicine. Cloth, 12mo, 200 pp.; price, post-paid, $1.00. Illustrated Medical Journal Company, Publishers, Detroit, Mich.

This small pocket-book, prepared by a practical chemist, contains very much of value, especially upon urinalysis. The first part, on physical diagnosis, is an abstract of the essential points included in the text-books, upon practice of medicine. The book is convenient in size, and can be carried with ease in the pocket for reference.

*Photographic Illustrations of Skin Diseases.* Part II. An atlas and text-book combined. By G. H. FOX, A.M., M.D. Hand-colored plates. Nearly 100 cases from life. Published by E. B. Treat, 5 Cooper Union, New York. Price, $2.00.

Some months ago we called attention to the first portion of this atlas and showed its value to practitioners of medicine. The atlas is now complete in twelve parts, and can be obtained from the publisher, either in sections or bound as one entire volume. In the remaining two parts before us, Dr. Fox has continued to give the reader good texts, which is both interesting and instructive. Syphilis, leprosy, neurotic and parasitic diseases of the skin, recurring in Parts XI and XII, receive attention from the author, and the photographic illustrations are also good upon the diseases just referred to. In writing of the treatment of syphilis, Dr. Fox states that iodide of potassium is a remedy which no patient ought to be compelled to take for any length of time. It does, he adds, its work quickly or not at all, and when unnecessarily continued is sure to do harm. This is especially true in those cases in which immense doses are administered. The author thus gives his positive clinical convictions upon the use of a very potent remedy. Dr. Fox, who has spent much time and labor upon the investigation of leprosy, after referring to the many remedies employed for its treatment, writes that no specific has as yet been found. There are certain balsams and oils which, if used, he says, for a length of time, produce a favorable change in the condition of the patient, though it cannot be said that they will cure the disease. This edition of the atlas upon leprosy is full of information, and unusually well written.

*Wood's Medical and Surgical Monographs.* Published monthly, $10 a year, single copies $1.00, by William Wood & Co., 56 and 58 Lafayette Place, New York City. Vol. viii, Nos. 2 and 3. November and December, 1890.

In these numbers are included the Treatment of Uterine Affections by Massage, by Dr. Eugene Arendt; Affections of the Stomach in Diseases of the Male Genital Organs, by Dr. Alexander Peyer; Cosmetics, by Dr. Heinrich Paschkis; and Hand-book to Dr. Koch's Treatment in Disease, by Drs. S. Grün and Severn. The article on Cosmetics is especially full of very good suggestions, and a very large number of prescriptions accompany the text. Wood's Monographs for the past year contained very many of the recent papers of much original research from physicians in all parts of the world.

*Tuberculosis or Pulmonary Consumption; its Prophylaxis and Cure by Suralimentation of Liquid Food.* By W. H. BURT, M.D., of Chicago, Ill. Published by W. T. Keener, 96 Washington Street, Chicago, Ill. 1890.

This is another very interesting book just issued upon a subject that is now attracting much attention in all parts of the world. The author has studied well the action of liquid food, and he has given the reader much information which will be valuable in treating this dreaded disease.

All forms of food in the liquid state here receive very careful attention from the author. The book is well arranged, and the publisher has placed it in a neat, compact, and useful form upon the market.

*The Physician's All-Requisite Time- and Labor-Saving Account-Book.* Designed by WILLIAM A. SEIBERT, M.D., of Easton, Pa. F. A. Davis, Philadelphia and London.

A physician usually has little or no knowledge of book-keeping. He has but little time to spend upon purely clerical labor. An accurate record of his accounts is, nevertheless, quite as important to him as to the merchant. In this work his demands are admirably met. Its system explains itself at a glance, the book is easily kept, no transfer of accounts is required, and a statement can be rendered in a moment's time. Last, but not least, the book meets all the requirement of the law and courts. It is, in fact, the completest, most ready, and compact work of the kind in the market.

## COMMERCIAL NEWS.

### American Institute Fair.

The Crosby Electric Co., 87 and 89 South Fifth Ave., New York, have recently purchased the business of the Federal Electric Co., including all their stock and patents. The Crosby Electric Co. took the highest award at the American Institute Fair just closed for the batteries manufactured by them.

### Diarrhœa in Childhood.

For a chilld 1 year old give:—

℞ S. H. Kennedy's Ext. Pinus Canadensis (dark), . . 3 drachms.
Acid Nit. Mur., . . . 5 dps.
Syr. Orange-Peel, q. s. ad 2 ozs.

M. Sig.: Teaspoonful every two or three hours.

A. R. de Escarra, M.D., Paris, France, says: With S. H. Kennedy's Extract of Pinus Canadensis the results have exceeded my expectations. In 3 cases of metritis, accompanied by abundant and very viscous secretions, I was able to note the improvement almost at a glance, and in one case the complete cure of these affections by using the pure Pinus Canadensis on hydrophile cotton plugs. In 2 cases of inveterate leucorrhœa, which resisted various well-chosen remedies, the improvement was truly marvelous; so much so, that I asked myself whether I had not fallen on a lucky combination. This, time will decide. From that time I have always recommended the Pinus Canadensis in all cases where I thought its action was clearly indicated.

### Something New.

You will find the advertisement of the Atmospheric Tractor Co., on third page of cover, of unusual interest and well worthy of perusal.

### Location for Sale.

A physician desirous of a fine location to practice medicine at once (or not later than May, '91) in a beautiful and thriving town on the Pennsylvania Railroad, can buy a fine dwelling-house and office combined. Present owner retiring from practice. For particulars, address, "G. W. C.," care Medical Bulletin, Philadelphia, Pa.

### Reduction.

The Sterling Remedy Co. have reduced the price of the Sterling Telescope Syringe and Medicated Flexible Pessary from $3 to $2 to physicians. See their advertisement on page 20.

### Bromidia.

A. W. McFarlane, Fellow Royal College Physicians, Edinburgh; Fellow Royal Medical and Chirurgical Society of London; Examiner in Med. Jurisprudence in the University of Glasgow; Honorary Consulting Phys. (late physician) Kilmarnock Infirmary; formerly Examiner in Medicine and Clinical Medicine in the University of Glasgow, etc., etc., in his monograph, "Insomnia and its Therapeutics," says:—

Bromidia (Battle) has in several instances been found reliable, in drachm doses, given in syrup and water at intervals of an hour until sleep is induced.—*Wood's Med. and Surg. Monographs*, Sept., 1890.

### An Unusual Opportunity.

Atlantic City, with its large, permanent, and transient population, is without a hospital! Advertiser will rent well-located building, long lease and moderate rental, to right party. Address, for particulars, "Owner," care Medical Bulletin, Philadelphia, Pa.

### Pure Food.

The question of purity in food is a matter of the greatest importance, and deserves most careful and constant consideration; yet so ingenious are the methods nowadays adopted to adulterate, and the processes employed to cheapen manufacture, that it is often very difficult to determine the merits of any particular article of food. With W. Baker & Co.'s Breakfast Cocoa, however, no such difficulty arises, for it is produced from the finest cocoa-seeds only, exclusively by mechanical processes, and, as no chemicals whatever are used in its preparation, all possibility of impurity is avoided. The result is that W. Baker & Co.'s Breakfast Cocoa is not excelled in solubility, and is not approached in purity by any similar product in the market, and it still remains, as for over one hundred years past, the standard of purity and excellence, and the most healthful and nutritive cocoa in the world.

### For Sale.

Complete Operating Chair, all positions; cost, $75; in use one month; solid oak; handsomely covered in fine leather. Cheap for cash. Address, "Executor," care Medical Bulletin Office, Philadelphia, Pa.

The McArthur Hypophosphite Company have a unique advertisement in this issue. You will never regret reading it. See page 2.

(continued on page 18.)